



**EPISODE 760**

# **Age In Reverse & Heal FASTER Using The Power of Your Mind**

**With Guest Dr. Ellen Langer**

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**SHAWN STEVENSON:** What if our mind was the most powerful medicine in the universe? According to decades of data compiled by our special guest, our mind can literally influence how much benefit we get from the healthy things that we do, what we deem to be healthy, and also our minds can greatly protect us from the negative things that we might be exposed to. Our perception is deeply determining our health outcomes. In fact, one of the most remarkable studies that are special guest conducted found that the way we think about activities that we do in our lives can lead to greater weight loss and better health. Let me explain. At the start of this randomized controlled trial, our special guest quizzed 84 maids at seven carefully matched hotels about how much exercise they got.

**SHAWN STEVENSON:** Okay. So, these are chambermaids, maids at seven different hotels. Now, one-third of the women said that they got no exercise at all, while two-thirds said that they did not work out regularly. Now, our guest and her team took several measures of the women's basic fitness levels, which indicated that they did indeed have poor health of basically sedentary people, then just over half of those women were told an unfamiliar truth, cleaning 15 rooms daily, pushing a resistant vacuum cleaner, scrubbing tubs, pulling sheets, all constitutes more than enough activity to meet the accepted recommendation of a half an hour of daily physical activity. The researchers even provided them specifics, 15 minutes of scrubbing burns 60 calories, 15 minutes of vacuuming burns 50 calories.

**SHAWN STEVENSON:** The basic message and the details were then posted in the maids lounges, in the hotels where 44 of these women worked to serve as reminders while a control group was left completing the dark about this. A month later, our special guests checked back in with the women and found remarkable results, the maids in the study group who simply changed their perception about the work that they were doing had lost two pounds on average, they had an average drop of 10 points in their systolic blood pressure, and they had significant improvements in their hip-to-waist ratios, again, simply by telling them that what they did involves some serious exercise. By all measures, these 44 women were significantly healthier, yet there were no reported changes in their behavior, only in their mindset, with the vast majority of the women now considering themselves regular exercisers, simply by doing what they were already doing. Their bodies changed because of their perception and there are so many examples like this, and our special guest is truly the leading expert in this subject matter.

**SHAWN STEVENSON:** She was doing these experiments before I was even born, and I've been such a huge fan of her work from afar, and today is very, very special because so many of the studies that we shared here on The Model Health Show have come from her students just

such a wealth of information and insight, and again, very, very excited to share this with you. Now, in this recent movement towards mindfulness, which you're gonna actually find out what mindfulness actually is today, which is probably gonna be an eye-opener for you in and of itself, but a common mindfulness practice, and I'm thinking about my friend, Dr. Wendy Suzuki at NYU neuroscientists, and part of her mindfulness practice is having tea, and this is something that's been done obviously for centuries, but making it into a practice where it's so much more and so much more beneficial than just the mere act of drinking tea itself, but if you're gonna drink tea, you might as well drink a tea that has some remarkable health benefits in addition to our perception of the tea itself, because if there's one thing that can be intrusive on the benefits that we're looking for, it's stress.

**SHAWN STEVENSON:** I wanna talk about that today as well, and there's one specific tea, more than any that's most correlated with reducing stress, and that is green tea. Now, green tea contains a unique amino acid called L-theanine, and it's one of these rare nutrients that's able to cross the blood-brain barrier and increase the activity of the neurotransmitter GABA, which helps to reduce anxiety, makes us feel more centered and relaxed. Another way that L-theanine works to improve our brain health, our cognitive health is noted in the peer reviewed journal Brain Topography, and these researchers observed that L-theanine from green tea intake increases the frequency of alpha-brain waves indicating reduced stress, enhanced focus, and even increasing creativity.

**SHAWN STEVENSON:** Now, there's one specific green tea, and if we're talking about a mindfulness ritual tea ceremony, a whole vibe, we're talking about matcha green tea that's so rich in L-theanine in particular, Sun Goddess Matcha Green Tea, it's shaded 35% longer for extra L-theanine to support the health of our brain and nervous system, is crafted by a Japanese tea master, and keep in mind, there are less than 15 in the world, and this is the first quadruple toxin-screened matcha green tea in the world. No added anything. No preservatives, sugar, artificial sweeteners, none of that stuff, just the very best matcha green tea on the planet, and I'm talking about Sun Goddess Matcha Green Tea from Pique Life. Go to [pikelife.com/shawn](http://pikelife.com/shawn), and you're going to get hooked up with up to 15% off their incredible teas, free shipping, free tea samples and so much more. That's [pikelife.com/shawn](http://pikelife.com/shawn).

**SHAWN STEVENSON:** That is [P-I-Q-U-E-L-I-F-E.com/S-H-A-W-N](http://P-I-Q-U-E-L-I-F-E.com/S-H-A-W-N). Go there right now, get yourself this incredible matcha green tea and so many of their other... They have about 20 award-winning tea flavors to choose from. Their cold extraction process, their tea crystals are at a whole different level, and again, they're all toxin screened for purity. There are so many nefarious things out there in even popular "organic teas" out there on store shelves. Pique Life goes above and beyond to make sure that you're getting the highest quality teas in the world. [Pikelife.com/Shawn](http://Pikelife.com/Shawn). Now, let's get to the Apple Podcast review of the week.

**ITUNES REVIEW:** Another five-star review titled, 'So Much Value' by M&M Gillen. I've been listening to The Model Health Show for a few years. I always get so much value. A lot of my healthy habits have come from here. I just got my copy of 'Eat Smarter' and can't wait to dive in. Thank you.

**SHAWN STEVENSON:** Thank you so much, and I appreciate you so much for popping over to Apple Podcast and leaving a review for The Model Health Show, and also picking up a copy of 'Eat Smarter.' And by the way, even in 'Eat Smarter,' it's USA Today national bestseller, and it's a book that went beyond the conventional ideas about food, looking at how our food impacts our cognitive function, our metabolic health, our emotional fitness, and so much more, and really looking at the process of things like fat loss, how does that process actually work? And one of my favorite aspects about the book in writing the book itself was sharing the information about how our mind... How are thoughts about our food, how are thoughts about what we're eating impact our biology, and in the book, I share a study that was actually from one of our special guest students, and this was from Dr. Alia Crum and her team at Stanford, again, one of our special guest students, and it was called 'The Milkshake Study,' and what the researchers did was whip up a big batch of milkshakes that were all 380 calories, but they put different labels on each of the cups and so some of the cups said that, for example, this was a 180 calorie sensible shake, while other labels on certain cups said that they were 620 calorie "indulgent milkshakes."

**SHAWN STEVENSON:** Now, keep in mind again, all the milkshakes are 380 calories, but the messaging on them was different, and after test subjects drink their respective milkshakes, some shocking things happen when they compiled the data. The researchers found that when test subjects drank what they believe to be a high calorie indulgent milkshake, their ghrelin levels, their hunger hormone levels had dropped as if they had consumed three times more calories than they had actually consumed, while on the other hand, when test subjects drank milkshakes that they believe to be low calorie "sensible milkshakes," their ghrelin levels barely budged. Meaning that physiologically, biologically, they were likely to be hungry again shortly thereafter because their hunger hormones were still very active in their systems because they didn't think that they drank very much.

**SHAWN STEVENSON:** Now, just to reiterate this point, once more, all of the milkshakes were the same amount of calories, but their perception of what was in them and our perception about calories and what they do in our bodies changed what their hormones were doing and changed their respective satiation with what they were having. So again, our mind is incredibly powerful, and this is happening 24/7, 365, every micro-moment of our lives, our perception of our health, of our lives, of ourselves, of our environment is determining what our hormones are doing. Our neurotransmitters, the make-up of our blood, all of the different chemicals that our body is producing is based on our thoughts, so our perception is

so powerful and we get to talk to the expert herself today about some of these things going on behind the scenes, and also how we can utilize this in our day-to-day lives to make us healthier and more resilient for years to come. Dr. Ellen Langer was the first woman to be tenured in Psychology at Harvard University, where she is still a professor of psychology. She is the recipient of three distinguished scientist awards, including the Arthur W. Staats award for unifying psychology, a Guggenheim Fellowship, and the Liberty Science Genius Award.

**SHAWN STEVENSON:** Dr. Langer is the author of 11 books, including the international best-seller 'Mindfulness.' Her trail-blazing experiments in social psychology have earned her inclusion in the New York Times magazine's Year in Ideas issue. She is known worldwide as the mother of mindfulness and the mother of positive psychology. Let's dive into this conversation with the one and only, Dr. Ellen Langer. Dr. Ellen Langer, so good to see you. Thank you for coming to hang out with us.

**DR. ELLEN LANGER:** Thank you for having me.

**SHAWN STEVENSON:** I was trying to hold back my excitement because your work is really not just an affirmation, but it's really helping me to understand the inner workings of so many different things that I've experienced personally, I've worked with thousands of people myself in a one-on-one context and obviously, the show reaching so many people, you are somebody who's asked these really powerful questions and did the studies to find out is this replicable or does this have relevance for other people, and even the title of your book itself is remarkable, 'The Mindful Body.' What does that mean?

**DR. ELLEN LANGER:** I don't know.

[laughter]

**DR. ELLEN LANGER:** I've written several books on mindfulness. The first one was called Mindfulness, then the next one I couldn't call Mindfulness because I had already used that title, so I called it 'Mindful Learning.' All Mindful Learning is Mindfulness and so on. But 'The Mindful Body' is supposed to bring to mind that there's something about the body that we're not paying attention to, and I think the subtitle really says it all, which is thinking our way to chronic health, and even the chronic that in the English edition, they wanted, they changed the title to thinking our way to lasting health. And that's fine with me. I don't care as long as people get a chance to read it, call it whatever you want, but chronic is always associated with negative, which is why they wanted to call it lasting, and I wanted to change that because people have the idea that as you get older, you fall apart, that's the end of the game, and it doesn't have to be that way, and when the medical world gives you a diagnosis with

some chronic illness, they also get a lot of it wrong. We have far more control over our health than people imagine.

**SHAWN STEVENSON:** It was so funny, I just went through a study in an earlier episode I just did, and they used the term chronic exercisers and having better health outcomes, and I just thought that that was so interesting because our belief about a word even can change how we associate with it. And also our biochemistry. Our thoughts change our bodies.

**DR. ELLEN LANGER:** Yes, exactly.

**SHAWN STEVENSON:** Alright. So, let's dig into this specifically.

**DR. ELLEN LANGER:** Alright. Let's go.

**SHAWN STEVENSON:** Because this is something that I've mentioned several times, which is... And it's so powerful, every thought that we think changes our biochemistry.

**DR. ELLEN LANGER:** That's right.

**SHAWN STEVENSON:** Instantly. This is something more tangible that we can track, hormones change, heart rate variability, all these different things, but you've done a bunch of different studies and just again thinking about these things that our thoughts really do influence our health outcomes, maybe even more so than the outer activities we might do.

**DR. ELLEN LANGER:** Yeah, I believe so. I did some very early work back in the '70s where what we did was to give nursing home residents choices to make and they lived longer. And how could that be? Why would making a choice and that choice making evolved into mindfulness and probably up front, we should make clear that mindfulness as I study it has nothing to do with meditation. Meditation is fine, this is just different. It's a simple process of noticing, and when you're noticing the neurons are firing, and 45 years of research shows that it's literally and figuratively enlivening. And it's easy and it's fun. The reason to differentiate it from a meditation in part is because meditation is a practice, mindfulness, as we study it, is a way of being. Once you recognize that you don't know, you naturally just tune in, and everything in the culture teaches us that absolutes, and since everything is changing and looks different from different perspectives, the uncertainty is the rule, not the exception. So, when you don't know, what do you do? Things become interesting, and it's also the case that meditation, for some people, it's hard to do. Mindfulness, as again, we study it is the essence of enjoyment.

**DR. ELLEN LANGER:** It's the way to become excited about things. Engaged. It's the essence of engagement. You notice, and as you're noticing, you notice more and you become... People

wait too often to get excited, and you don't have to wait, what you need to do is notice new things about the person, the event. And all of that is good for your health. So, having fun, which people often think of as, I'm gonna do the hard work, and then I'll have fun as a reward, have it all wrong, that the fun is the way the body regenerates itself and makes us not only healthy but happy.

**SHAWN STEVENSON:** Ooh, we're gonna get into all. This is so good. I was looking at one of your interviews a little bit earlier, and you stated that everything we do is dictated by the rigid beliefs we have. You said we shouldn't have learned them in this absolute way in the first place.

**DR. ELLEN LANGER:** Yeah.

**SHAWN STEVENSON:** Talk about that.

**DR. ELLEN LANGER:** Well, what you're taught in schools and by your parents are facts, and facts are context-dependent. They're not true all the time, but people don't realize that. So, an example, how much is one plus one?

**SHAWN STEVENSON:** Obviously, people would say two.

**DR. ELLEN LANGER:** Two. Right. And I just gave another podcast, I don't wanna keep saying this because soon everyone will know the answer, which is good, but they need to understand what's behind the answer. Well, what's behind the answer is that sometimes... Okay? Whatever we're taking as absolutely true, is sometimes true. Not all the time. So, one plus one equals one, if you're adding one pile of laundry plus one pile of laundry, if you add one cloud plus one cloud, one plus one is one. And in the real world, it probably doesn't equal two as more often as it does, and the reason it's a good example is because this is the one fact that everybody knows.

**SHAWN STEVENSON:** Right.

**DR. ELLEN LANGER:** But it's wrong, right? So, if we don't learn things in this absolute way, everything would be more interesting.

**SHAWN STEVENSON:** Yeah. Context is so important.

**DR. ELLEN LANGER:** Yeah, it's important in ways that go well beyond knowing facts, conditionally or not, so for example, we've done a lot of work on fatigue, and most people think the body is such that after a certain amount, you're just going to get tired, that's all



there is to it. But fatigue turns out to be mostly a psychological construct. Fatigue is context-dependent. So, the first test we did of this was so simple. We asked people first to do 100 jumping jacks and tell me when you're tired. They get tired at around 70, then we ask another group of people, do 200 jumping jacks. Tell me when you get tired. They get tired at 140. Alright, and so on. Now, there was a study that Frank Beach did forever ago not I, with mice. If you take a little boy rat... Rats or mice. Rats, okay, who knows. We take a little boy rat, you introduce a little girl rat, they'll copulate. Then my little boy rat can't take anymore, right? He's tired, he needs a refractory period, unless immediately you introduce a new little girl rat. So, as soon as you change the context, our energy comes back.

**SHAWN STEVENSON:** Interesting.

**DR. ELLEN LANGER:** Right? And so, imagine and a picture that comes to my mind frequently is somebody who's word processing all day, back starts to hurt and then they go home and they play the piano, alright? It's the same thing, but it's completely different.

**SHAWN STEVENSON:** Different key chords.

**DR. ELLEN LANGER:** Because of the... Yeah. And so if we change the context, often enough, fatigue will be a thing of the past. We did another study and then I'll give you the larger category of these, where we had people in a sleep lab and take lots and lots of measures, and they wake up and we've moved the clock unbeknownst to them, so for a third of the people, they think they got an hour more sleep than they got. For a third, they think they got an hour less, and a third of the people the amount of sleep they got, biological and cognitive functioning follows perceived sleep.

**DR. ELLEN LANGER:** Alright, so our perceptions drive the whole ball game, and we have very rigid ideas because we all grew up many years before you, in a world and we had mind and body and they were separate things. And the assumption was, we have to keep the body healthy. Not realizing how important it was to keep the mind healthy, and all of the work that we've done, well, many experiments described in 'The Mindful Body,' which goes beyond this idea, but the idea is to put the mind and body back together. These are just words. When we put them back together, it's one thing, anything that's happening on any level, your thoughts, your body is happening basically all at the same time, so if you imagine that your mind and body are one thing, then wherever you put your mind, you're putting your body. And that explains that sleep study, it also explains the fatigue, but we have so many more, but I'm gonna give you a chance to ask me a question.

**SHAWN STEVENSON:** I love this so much because this is... It's so silly that we've separated the two, and the reality is very, very different, and just even in the context of that sleep study.



Our belief about how much sleep we got, is gonna affect our, for example, if maybe we got seven hours of sleep, which we usually do but we think, and we only got six, and we feel like, I'm actually tired today and kinda drag in, you got the same amount of sleep, but it's based on your perception of what it means to get an hour less sleep.

**DR. ELLEN LANGER:** Yeah. There's a study I wanna tell you about that I haven't talked about on the, feels like 10 million podcasts that I've been doing lately. And it's about cold. Common cold. So, we take people... I'm gonna give you a rough outline of it, the details are in the book, and people are in the lab and they see a big video of people coughing and sneezing. The room is set up with things like tissues and chicken soup, everything to prime a cold. Okay? Without introducing an antigen, people get sick. Okay? How did it happen? Well, one possibility is that when you have a cold, it never fully goes away, so it becomes dormant and these primes awaken it or something even more mysterious, but you can think yourself into it, and I assume we can think ourselves out of it. It's very hard to do a study showing that we can talk ourselves out of the cold because when people have colds, the scientific community is not eager to have them all come together and spread the cold to other people, and also that you just wanna stay in bed and watch TV and eat what you're not supposed to eat as you baby yourself to get over to the cold.

**SHAWN STEVENSON:** Yeah. There's even studies where they're exposing people to what they believe to be whether it's from somebody else's mucus that has a pathogen, and the folks aren't getting sick when exposed to the thing. What's going on behind the scenes? I would imagine there's context involved and also probably it has to do with our level of health, our level of stress and things like that.

**DR. ELLEN LANGER:** Yeah. I had just mentioned this recently, but I think it's important, from my perspective, the major killer is stress. Now, the medical model way back when decades ago, thought that psychology and things like stress were irrelevant, all that mattered was whether you introduce bacteria, pathogen, whatever to get sick, and now they've come closer to appreciating the importance of psychology, but I'm still trying to get people to come the whole way, we don't have to wait so long until we realize that our psychology is probably the driving force for all of it.

**SHAWN STEVENSON:** Yeah. At least acknowledging that it matters. There was a really fascinating study that came out July 1, 2021, in the midst of all the craziness, and it included data from over 800 US hospitals, over 500,000 COVID-19 patients, and they found that the number one risk factor for death was obesity, but what was most surprising for me, and I was trying to share this with my colleagues and also get people informed about it, the second leading risk factor for poor outcomes including death from COVID-19...

**DR. ELLEN LANGER:** Pessimism.

**SHAWN STEVENSON:** As they labeled it, anxiety and fear-related disorders was the second leading risk factor.

**DR. ELLEN LANGER:** Yeah, yes. And people don't understand that stress is psychological, that events don't cause stress, you know that because you take any event and you see some people are stressed and some people aren't, so how can that be. What causes stress are the views you take of the event and when people are mindless, they don't have a choice of how to see things. When you're mindful, you see, this can be explained in many different ways, and if this way makes you crazy and this way makes you feel good, clearly you're going to choose the latter, but we have a very clear sense, and people believe, for instance, that work is necessarily stressful. Why? Nothing is necessarily anything.

**DR. ELLEN LANGER:** So, if we learn we have more of these choices when we're younger, I think it will serve us well as we get older, and what we need to do when something happens is to look back at past things that have happened and just say no, it wasn't the end of the world. And in fact, there were some ways it was actually an advantage for it to happen, so I recommend two things with respect to stress, the first is that stress requires a belief that something is going to happen, and second, that when it happens, it's going to be awful. So, the first, we can't predict, we have no idea what's going to happen, and what am I going to say next? You don't know. Are people going to be watching this or not? We don't know.

**DR. ELLEN LANGER:** Well, anyway, we don't know. That's the rule, not the exception. So, ask yourself, what are three, four reasons that it won't happen, so you went from thinking it's definitely gonna happen to maybe it won't, and you'll start to feel better, but I like the next part. Assume that it is going to happen. Let's let it happen. How is that a good thing? And if you can get past that by looking over your past stresses, because things, again, in themselves are not good or bad, it all depends on how we view them. So, that's number one. Number two is a one-liner that my friends seem to put on their refrigerators. Let me share it with your audience, which is ask yourself, is it a tragedy or an inconvenience? Most of the things that we're stressed about on the anxiety, as you mentioned are silly. I'm not gonna get the project done in time, oh my god, I forgot to pay you back the money I owe you, I didn't call the plumber. None of these things matter. And when you ask yourself that simple question, you can breathe a sigh of relief and come back to yourself and just start enjoying things again.

**SHAWN STEVENSON:** Yeah. It's not the event itself. It's always our perception.

**DR. ELLEN LANGER:** Exactly, and so the more mindful you are, the more choices you have as to how to understand it.

**SHAWN STEVENSON:** You know what's so wonderful about your work is that it doesn't negate the stuff in life, those things exist, different things happen, whether it's an exposure to a pathogen, whether it's an exposure to or suffering an injury of some sort, there are certain laws of the body and whatnot, but in reality, even our thoughts are going to influence how we interact with those things...

**DR. ELLEN LANGER:** Sure.

**SHAWN STEVENSON:** And also how quickly we heal. Can you share that study?

**DR. ELLEN LANGER:** Yeah. So, this is one of the most recent mind-body unity studies that we ran and did this with Peter Aungle, my graduate student. So, we take people and we inflict a wound. Now, I'm not sadistic, and even if I wanted to really hurt you, the review committee isn't going to let me. So, it's a minor wound, but it's a wound, and people are in front of a clock, and for a third of the people, again, unbeknownst to them, the clock is going twice as fast as real time. For a third of the people, it's real time. For a third of the people, it's half as fast as real-time. Most people would assume the wound's going to heal when the wound is going to heal. Right? Based on "real time." But that's not what happens. What happens is the wound heals based on perceived time, the time the clock tells you. Right.

**DR. ELLEN LANGER:** So clearly, people are healing themselves faster, and I think that the medical world, if you were to break your leg or something, and you ask the doctor, you don't have to ask a volunteer the information, how long it's going to take you to heal, and they give you the outer end. And I think that people should be told, the fastest healing that we know and so far has been so that you organize yourself differently. When you're expecting it to take forever, you don't pay any attention to it really, and there are things you can attend to, to increase the healing process.

**SHAWN STEVENSON:** It's interesting to have a close proximity situation last year, I tore my calf muscle, and the prognosis was four to six weeks to return to normal activity, and I did it in three weeks. I was doing squats and lunges and all the things and what I shared with my audience and also funny enough, I was doing a talk in Mexico shortly thereafter and talking about some of the benefits of being fit and whatnot. There is some data affirming if you are fit and you do have more resilience against injuries and you recover faster, but the most important thing was my thought process because I immediately... As soon as I heard the prognosis, I was like, I'll do it faster than that.

**DR. ELLEN LANGER:** Yeah, no, that's beautiful. And that's the way we should all be. I have so many things and I'm gonna forget them. Let me just say, I smashed my ankle years ago, didn't

break it, smashed, and the doctors told me that I'd never walk without a limp. Now, I don't really listen, so I don't remember that they told me that, and that hasn't affected my tennis or anything else. I don't have a limp. What people need to understand is that medical science, like all science, depends on experiments that can only give us probabilities. If you run an experiment and you do the exact same thing again, which you can never do exactly the same thing, you're likely to get the same findings. Those probabilities are translated as absolutes, alright? So, if most people take four weeks to heal, doesn't mean all people take four weeks to heal, and this came home to me years ago in the oddest situation. I'm at a horse event, and this man asked me if I'd watch his horse for him because he's gonna get his horse a hotdog. I'm a straight A student. I'm the one you hated.

**DR. ELLEN LANGER:** I memorized everything. I know horses don't eat meat, and I had to keep myself from laughing at this man. He comes back with the hotdog and the horse ate it, and I loved it. Most people... So, I knew that everything I thought I knew I could be wrong. But the reason I loved it is that opened up a world of possibility, that means everything that we know can be otherwise, which was exciting for me.

**SHAWN STEVENSON:** So, this is really bringing to bear and I want to encourage this in everybody, and this is something I try to do frequently and also myself, 'cause you can catch yourself being the extra...

**DR. ELLEN LANGER:** Sure.

**SHAWN STEVENSON:** But really bringing a mind of curiosity, a child-like mind to things, and resisting being the expert who knows, this is what it is, this is how things are, and start to notice that in yourself and because when you do that, you start to miss out on this vast spectrum of possibilities, because as you just said, no two studies even are ever the same. It's impossible.

**DR. ELLEN LANGER:** Exactly the same. Right. Right. Now that, essentially, the medical world gives us best guesses, and those best guesses are accepted as absolute fact. And there are some things that some doctors say, not the best doctors, but that I can't... In today's world, it's just mind-boggling to me that they would tell you, you have six months to live. There's no way they can know that, and there are lots of things that are done that I think are implicitly following the hanging crepe philosophy. Do you know what that is? Many years ago when somebody was dying, they'd hang black crepe, and so the hanging crepe philosophy is, I could tell you you're gonna die, I could tell you you're going to live. If I tell you you're going to live and you die, I'm going to get sued. If I tell you you're going to die and you live, you'd thank me, basically. And so they were, by nature, taking the more limited view, the more negative

view, now that we know that these things become self-fulfilling prophecies. You don't have the right to lead somebody down a path that's actually going to cause them harm.

**SHAWN STEVENSON:** Yeah. We can dramatically change, again, our biochemistry, based on our thinking of thing.

**DR. ELLEN LANGER:** Yes, exactly.

**SHAWN STEVENSON:** I shared this with you earlier that before we got started, I received this diagnosis and I was told that the condition was incurable, and my physician as well meaning as he might...

**DR. ELLEN LANGER:** But you have to understand, incurable only means that the medical world hasn't figured out a way to cure it. Now, there is always something that you yourself can do, but when we turn ourselves over to the medical world, we give up that opportunity to control our health.

**SHAWN STEVENSON:** It says if I was quoting you before I met you, with that, and always sharing that because I was told that I'd never walk normally again, I'd be in pain for the rest of my life, I'd be on medication. I was fitted with a back brace and all these things, but since that moment, being able to deadlift over 400 pounds, 50-inch vertical box jump, sub-11...

**DR. ELLEN LANGER:** Oh stop showing off.

**SHAWN STEVENSON:** 100 meters... Just all the things that I've been able to accomplish that were supposed to be impossible, impossible. That I would do all these things, let alone... And I just mentioned some of the kind of extreme pieces, but just being able to live a life without pain and to interact with my family, to do the things that I wanted to do. I was told that that was not possible. And that's the nocebo.

**DR. ELLEN LANGER:** Right, right. And that's the message for people to know that we cannot know whether something is possible or impossible, but if you don't try clearly, then you're not...

**SHAWN STEVENSON:** You got it.

**DR. ELLEN LANGER:** Exactly.

**SHAWN STEVENSON:** You're welcome. This is especially today, putting this in the context of how we perceive aging. There's a big change that's taking place right now with certain guilds

of people who are aware of this, but you have one of the coolest studies on elderly men. Let's talk about that.

**DR. ELLEN LANGER:** Okay. So, this was the first test of the mind-body unity. Do you remember we take the mind and body, we put them back together in our minds and then wherever you're putting the mind, you're necessarily putting the body. So, we took old men, this is back in... I think we ran this in 1979, so quite a while ago, and what we were gonna do was to have them live as if they were the 20 year old younger selves. Okay? And they lived in a retreat that was retrofitted to 20 years. It wasn't quite Hollywood, I didn't have the budget for that, but anything that was a marker of it being today was removed, replaced with books, magazines and posters, everything from the past, and to talk about past events as if they were just unfolding., as well as we could, we went back in time for them. As a result of this, it was remarkable. As a result, their hearing improved. When have you ever heard an 80-year-old's hearing improve without medical intervention, even with medical intervention? Their vision improved, their memory, their strength, and they looked noticeably younger by the end, and so that was the first... It was exciting and a reason to continue with all of this, but I had a personal experience that was driving much of the research.

**DR. ELLEN LANGER:** So, my mother had breast cancer and it had metastasized to her pancreas. That's the end game, right? So, because it was the end game, her muscles weren't exercised while she was in the hospital and people wrote her off. Then it just disappeared. It magically disappeared. And I think that spontaneous remissions are not nearly as infrequent as the medical world might have us believe. I'm not... I haven't questioned enough medical people to know what they believe, but the common view is, we're not gonna study it, it's hard to study and it really happens, but you can imagine all of the people who don't have access or desire to come to the medical world that a tumor is there, they don't even know what's there and the tumor is gone, we don't know how often that happens with or without them taking any action to make themselves better, but I think that if you believe that there's nothing you can do to help yourself, then you're not going to do anything. And if you believe that you're dying, the system starts to turn itself off and that we can exert enough control just by assuming that we're going to be better.

**DR. ELLEN LANGER:** You organize yourself differently. You're more mindful, and I've got four or five investigations showing that when people are more mindful, they live longer. There's no advantage, I think, in the negativity that seems almost rampant. It's not the case, although people believe it is that seeing the glass as half full is the same as seeing it as half empty, because once you are looking, once you assume it's negative, then you're just looking for negative things, and when you think it's positive, you're looking for positive things, so positive leads you to take in much more information, more critically, and just engage yourself, and when you're engaged, the more engaged you are, the neurons are firing, and that's good

for your health, and it's always the case despite the medical world... And I have a great deal of respect. These are smart people who mean well, it's just the edge that I'm arguing against.

**DR. ELLEN LANGER:** Believe that there's a chronic illness for them is uncontrollable, you can never prove un-controllability, all you can prove is that we don't know... Which is very different. You see, if I tell you, you can't, it's humanly impossible, then you won't try. If I tell you who knows, if you wanna try, you might try, and if you try, you might succeed, it's a different way of organizing ourselves and my beliefs without any data, but it feels to me like a thought experiment, is that if you make the rest of yourself strong, that has to help. So...

**SHAWN STEVENSON:** Seems kinda logical. And I'm a big fan of results, so just looking at the current state of affairs with all of our apparent innovation, we've got all these wonderful drugs and different sophisticated imaging and all this different stuff, and yet, in particular in the United States, we're kind of the king of this. We are the most chronically ill, sedentary, mental health, multiple mental health epidemics, we're not doing well, something is not really adding up here, and so you're amongst friends and talking about this because I think we're really missing the point...

**DR. ELLEN LANGER:** Yeah.

**SHAWN STEVENSON:** On what's moving all of this, what's determining our choices and what we're eating, who we're interacting with, it really starts with our beliefs and perception.

**DR. ELLEN LANGER:** Well, because... Yeah. And it goes back to notions of good and bad, so we had a sense that exercise doesn't sound like fun. It had to be made fun by people, that food that's good for you isn't as tasty as food that's not good for you, so you always feel like you're giving something up in the service of your own health. That food... I have a food story, just so you see how much we can control everything about our lives. This was, I was married when I was very young, embarrassingly young, and we went to Paris on our honeymoon, and I ordered a mixed grill, and I have to appreciate that I was 19, 18 or 19 going on 30, very sophisticated because I was a married woman. Alright. I ordered the mixed grill. On the mixed grill was pancreas. I don't know, I felt I had to eat it because that's what a married... I don't know why I believed this, but being sophisticated in Paris, you have to eat whatever you're served. So I eat... I'm a big eater, I ate everything on the plate with... Now comes the moment of truth, can I eat the pancreas? I start eating it and I'm literally getting sick, literally. And my then husband starts laughing, I say, "Why are you laughing?" He said, "Because that's chicken, you ate the pancreas a while ago."

[laughter]



**DR. ELLEN LANGER:** Okay. So, how good and tasty something is, is a function of our thoughts. I did the study with an undergraduate years ago, a simple little study, we could Godiva chocolate and an inexpensive chocolate. And we had half of the Godiva chocolate wrapped in the inexpensive wrapper and the inexpensive chocolate wrapped in the Godiva, so you're eating... You're either eating what is Godiva, and you know it's Godiva chocolates or you're eating inexpensive chocolate, you know it's inexpensive or the off conditions. And what happened was when people thought they were eating Godiva chocolates, they liked it more. Okay. But what was interesting was that they spent more time eating it, they're savoring it. And any case can be enhanced by the attention you give to it, so we can affect the food that we eat, and it seems we should see food as something we're going to enjoy or not, not whether it's good or bad for us.

**DR. ELLEN LANGER:** What is good and bad for you, I mean, I hope you're not of the belief, right, 'cause coffee was bad for you, I think now coffee is good for you. Wine was bad for you. Now, wine is good for you. Chocolate was bad for you as long as it's what? 75% dark, these things are all changing, and I think that if you eat something and you enjoy yourself while you're eating it, it's going to have more positive effects on you than not anyway regardless of what the nutritionists say, which maybe...

**SHAWN STEVENSON:** That's what...

**DR. ELLEN LANGER:** Heresy right now. But I need to say this to you.

**SHAWN STEVENSON:** That's what I do. But again, you're amongst friends here because it's just silly, the labels that we give food, giving food morality.

**DR. ELLEN LANGER:** Yes, exactly. Exactly. Bad food. Bad food.

**SHAWN STEVENSON:** This is a good one or bad one. Are you cheating? All these different things.

**DR. ELLEN LANGER:** How could you eat that? Yeah.

**SHAWN STEVENSON:** We have to understand our psychology. What do we attach to those things, and our body's association with those things is going to change based on our beliefs about them.

**DR. ELLEN LANGER:** Right, right, exactly.

**SHAWN STEVENSON:** So, being mindful of that, and also, and just to circle back to that study with the elderly men, something else that you noted was when everybody was... You had a control group as well, and the folks that were in the experimental group, but I want you to also talk about bringing their suitcases in.

**DR. ELLEN LANGER:** Yeah. Okay. Well, so we had two groups. So, we had the group that we were going to have go back in time. We had another group that was going to reminisce, so they weren't living in the same place for the same amount of time, but every conversation about the past was in the past tense for the reminiscing group or in the present tense for the experimental group. Now, this was a major endeavor, and if I had realized I was young when I did it, if I had realized what it was going to take, I probably wouldn't have done it. I'm putting myself in a position to be in charge of the lives of these seven old men, what they ate, what they did for a week's time. It's big, right? Okay. So, I take the first group to the retreat and we're in a van. Now people also need to understand this was very long ago. This was pre-Google. So, just to have music playing from the past was difficult, right, we had to do research to find out what was the music of 20 years ago.

**SHAWN STEVENSON:** And you got to get it. It's not right there on your phone.

**DR. ELLEN LANGER:** Exactly. Now, you just say, Google, what was... Three seconds, you have the answer. Alright, so we had taken the comparison group, the reminiscing group, to the retreat first, we're almost there, and all of a sudden I realized, wait a second, my post-doc, I guess I was sexist at the time, my male postdocs graduate students weren't with me, here I was alone with these seven men, that meant seven suitcases, there was no way I was gonna carry those suitcases. It would have been good exercise had we done today, but... So we get out of the van and I make an announcement, you're in charge of your own suitcases, I don't care if you move it an inch at a time or you unpack a shirt at a time, it's up to you. Now, you have to appreciate how different this was from the way these men had been treated the evening before. Right? By people who love them, but didn't see them as able to do anything on their own, were over-caring for them. Now, take care of yourself. You add to that, that they're in a novel environment, remember novelty is going to provoke mindfulness. So, this group also improved, but not as much as the experimental group.

**SHAWN STEVENSON:** That's so fascinating, and thank you for mentioning that. Because that's another part of this study that can get overlooked is that just changing into a novel experience, they're gonna see some improvements in some of their biometrics.

**DR. ELLEN LANGER:** Well, it's also that when you get older, people often think they can't do it. Whatever the it is.

**SHAWN STEVENSON:** They're coming into it with that belief.

**DR. ELLEN LANGER:** Yeah. And there is, you can't... Just as there's no evidence that an experiment of that disease is incurable, there can be no evidence that you can't do whatever it is, that I could ski the black diamond on one leg. Well, I can't, but maybe I can. You can't prove that I can't. Now, what happens when people get older is as soon as they see themselves not able to do something, they assume in a broad way, that they can't do it, not I can't do it today because I didn't have a cup of coffee this morning. I didn't sleep well, maybe tomorrow, and they just eliminate one activity after another, needlessly. I'm at that point in my life, I play tennis, and I have too many other things happening, so I haven't been playing as frequently as I would like, and I have to stop myself from believing that, well, maybe it's a sport of the past for me, because I still enjoy it. You know that what people need to understand is you can do everything that you've ever done, you may just do them differently, and the difference is not necessarily a diminished performance in any way. You know, when I was younger and I was playing tennis with my step-son when he was young, and his friend, so they're 16-year-old kids, they didn't know how to play tennis, they're running all over the place.

**DR. ELLEN LANGER:** It was easy for me to play against them, even though they were faster, had more energy, because I knew that if you're facing this way, the ball is likely to go here, and they hadn't yet learned that, so as you get older, you learn alternative ways of doing things. And the mistake is for people to say that each of those changes is somehow behaving less than. And another thing that is everybody worries about losing their memory, and I think that for me when I was... I don't know, a young up and coming, let's say 35 years old, and I knew that I had to learn people's names, I don't know why, but I think that was my belief.

**DR. ELLEN LANGER:** Okay. Then I get older and at this point now, this might not sound kind... I don't really care what anybody's name is, you introduce yourself to me, if I'm gonna need your name, I'm gonna have another opportunity, and if I need it, and I don't have it, I'll ask you. What is the big deal, and so... Much of the time now, this is important, I think, because people think that they've forgotten things when they're older, when if it's like what I'm saying with these names, I don't learn it in the first place, so then if I don't know it in the second place. It's not that I've forgotten it. Alright? So, we change much of what we're doing, we have different motivations, different values, and we often see ourselves being different, but not recognizing why.

**DR. ELLEN LANGER:** So, when you're a young academic, you might be publishing like crazy, alright. And then you get older and you may be publishing less, and then if you're in the first environment surrounded by all these young, you feel inadequate. Oh my god, they're publishing so much more than you are. Not remembering that you change what you were

doing for some good reason, which takes me to what is probably with all the things that I've done over 45 years, it feels to me the most important, although it doesn't sound the most important, say that making people live longer and all of that, is very important to me, seeing how much control we have over our health, but this one is just recognizing that behavior makes sense from the actor's perspective, or else the actor wouldn't do it, which means in the context of aging, that when I do something differently, I'm doing it differently, because I care less about it, I care differently about it, it doesn't always mean a decrement.

**DR. ELLEN LANGER:** And in an interpersonal context, which is crucial for our health, it would be hard for me to imagine somebody who is a miserable... Who likes nobody, nobody cares about them being a healthy individual. That relationship, social support, are very important for our health because it's important for our happiness, and remember those are essentially one thing, and that when you see that other people's behavior makes sense, you no longer judge them, and when you use that role for yourself, your behavior makes sense, or else you wouldn't have done it, you don't judge yourself. And so, if I see you as somebody impulsive, I don't wanna have anything to do with you, when I see you as somebody spontaneous, I want to embrace you. Well, it's the same thing, for every negative there's an equally strong positive, and so then your relationships improve and as they're improving, you're freer to explore things together, you're happy or so, when you're happy, you're going to end up more mindful, the neurons are firing. And it all feels good.

**SHAWN STEVENSON:** Yeah. You get to pick what you notice and how you perceive the things.

**DR. ELLEN LANGER:** Well, that's so important to see, because people think that when something is novel, they will notice it and they don't recognize that everything is novel, who they are today is novel.

**SHAWN STEVENSON:** Everything, every minute, every moment it chances.

**DR. ELLEN LANGER:** I had an experience, I actually wrote The Mindful Body started off as a memoir, and then became what it is, which is similar to Mindfulness, so there are a lot of personal stories in there, and there's one story, I don't remember why I told it, but it's fun here, where a friend of mine who had an afro would take a shower, and we were supposed to go out to dinner, so I'm waiting, I'm waiting. And then she'd be fixing her hair... Now, I saw her before she went in the shower, I saw her when she got out of the shower. To my mind, it's exactly the same, but to her, she's noticing the tiniest ways it's different, and that's what we can do with ourselves. It drove me crazy, but I couldn't be fed instantly, but it's always changing, it's always different, and when we're being mindless, we hold things still and give up all the control we otherwise would have.

**SHAWN STEVENSON:** Yeah. And with that we also get to choose how much enjoyment or lack thereof we have in life, thinking about a certain character trait for me, for example, my wife chronically will not replace the tissue in the bathroom, right?

**DR. ELLEN LANGER:** Yeah.

**SHAWN STEVENSON:** And I used to get an attitude about it.

**DR. ELLEN LANGER:** These things... Yeah.

**SHAWN STEVENSON:** Why don't you just... I don't want you to be an emergency situation, why don't you just change it out? But then I start... I changed the perception of it too, this is the way that I get to take care of her and make sure that she doesn't have a moment where...

**DR. ELLEN LANGER:** So, I live with somebody who leaves the cabinets open and it'd drive me crazy. I would just shout... And then, what is the difference? And if you leave the cabinets open when you're cooking, you don't have to keep open because you can see the spices here, you need that jar over there, and what have you. Yeah, no, I think that we're brought up to think there's a right way, and we know it, because if what we were doing we didn't think was right, we would change it. Right? So, necessarily, everybody thinks they're right. You answer that, the belief there is one way that makes anybody different from us wrong, which causes a lot of interpersonal strife.

**SHAWN STEVENSON:** Speaking of keeping things open, she would also not fully closed lids on containers after putting food away. And it is just like, you did all this work to make the food, put it away and put it into a container, but not put a lid on it, and I'm just like... But then when her mom would come by, my amazing mom-in-law makes food. Same thing, the open corner of the lid, and so... But here's the thing...

**DR. ELLEN LANGER:** It's easier to open the next time.

**SHAWN STEVENSON:** The perception change was... That part and also they're cooking full for me. Same thing with your partner leaving the cabinets open in the midst of cooking, they're making food, that's something to celebrate and to focus on that rather than getting pissed.

**DR. ELLEN LANGER:** No. But see, my view is more extreme than that, because what you're saying is that, well, these things are bad, but these other things are good, so we'll ignore the bad, and what I'm saying is, the bad and the good are exactly the same thing. It's all depending on the way you're going to address it, so it is... It's a very different view, people think. So, let me say that in a different way. Everybody thinks there are some good things and

bad things about people or about anything, food doesn't matter what you're speaking to, so let's say there are 10 things... Most people would probably think, okay, so there are four bad things, six good things. So on the whole, it's good. And that's the argument you're raising what I'm saying, each and every one of those things is good, bad or indifferent, depending on how you look at it, it is nothing... It doesn't have an evaluation, it's an event, it's an item until we impose that frame on it.

**SHAWN STEVENSON:** Yeah. And again, we get to pick.

**DR. ELLEN LANGER:** Right.

**SHAWN STEVENSON:** We've got a quick break coming up. We'll be right back. There's a natural ebb and flow of our body temperature throughout the day and through our evolution, there's a natural drop in our core body temperature at night to help us to facilitate sleep. Certain hormones are released, certain enzymatic processes for repair. Certain things change in our brain when our body temperature is going down in the evening in association with the nocturnal pattern of life itself here on earth.

**SHAWN STEVENSON:** When things start to get darker, our core body temperature goes down. It's how we evolved. Now, today we can throw a glorified monkey wrench into that natural process. And what the research indicates is that, one of the primary things that's underlying insomnia is an inability for our body temperature to be regulated, specifically in the evening. We're seeing folks with chronic sleep issues having a much higher core body temperature at night.

**SHAWN STEVENSON:** And this was highlighted by a study that was published in the American Journal of Physiology. Now, a new study with this in mind was just conducted and it included 32 participants, and they were recruited into a three week clinical trial to see if supporting thermal regulation with their bedding can help to improve their sleep quality. Now, the researchers took subjective and objective data monitoring their sleep with devices to see the impact of their sleep conditions. And so the researchers utilize some Bamboo Lyocell Sheets that support thermal regulation, that are antimicrobial, that are moisture wicking. And they found that by sleeping on these sheets, the study participants had a 1.5% improvement in their sleep efficiency. What does that mean? What does that equate to? That's equating to an additional 7.2 more minutes of restorative sleep per night. Now, what if we stretch that out? We're talking 43 extra hours of sleep per year.

**SHAWN STEVENSON:** They're still doing the same activity, still in the same bed, but not getting optimal sleep. There's a difference between getting restorative sleep and just being unconscious or just being in the bed. This simple thing, just what we're sleeping on can

improve our sleep quality, by the way, subjectively, so that was the objective data. Subjectively, the participants found that their mental alertness during the day following sleeping on these sheets improved by 25%. And overall, 94% of people prefer sleeping on these sheets versus whatever else they were doing before that. Now, these sheets are from Ettitude, and these are my fav... I love these sheets so much. I didn't know that this was even a thing. I didn't know that this existed, that this mattered so much. But once you sleep on these sheets, you truly understand why. They're free from harmful chemicals, irritants, allergens, are hypoallergenic and also they're self deodorizing.

**SHAWN STEVENSON:** They inhibit bacterial growth, they're breathable. Moisture wicking also supports thermal regulation. But something truly special because I love these sheets so much, I actually reached out and connected with these folks and I got a 15% off discount for our audience here. So, go to [ettitude.com/model](https://ettitude.com/model). That's [E-T-T-I-T-U-D-E.com/model](https://E-T-T-I-T-U-D-E.com/model). Use the code model 15 at checkout. Get yourself some of these incredible sheets. And these are a great gift as well. By the way, I get these sheets for friends all the time. I love them so much. And also they're giving you a 30 night sleep trial. So, you get the opportunity to sleep on them, think on them, dream on them. If you don't love them, just simply send them back for a full refund. Go to [ettitude.com/model](https://ettitude.com/model). Again, that's [E-T-T-I-T-U-D-E.com/model](https://E-T-T-I-T-U-D-E.com/model). Use the code model 15 altogether at checkout for 15% off. Now, back to the show.

**SHAWN STEVENSON:** Now I wanna ask you about this because I just went through a study and it was called the 'Milkshake Study'.

**DR. ELLEN LANGER:** Yeah.

**SHAWN STEVENSON:** You know about this one.

**DR. ELLEN LANGER:** That's my student, Alia Crum.

**SHAWN STEVENSON:** Of course. Oh, see, I love this so much. Again, you are so amazing, but just how our perception of the calories in the food influenced the hormones we were producing. In that case, it was ghrelin, but you also show that our perception of time can also influence blood sugar. Talk about that.

**DR. ELLEN LANGER:** Yeah. It's funny because I don't realize until I'm doing these sorts of shows, how many times I've used clocks, [chuckle] in these studies, this is another clock study, right? So people as type two diabetes come into the lab. We give them all sorts of tests, then we're going to have them play video games. And all of this will make sense in a moment. But play video games and they're told, change the game you're playing every 15 minutes or so. That's to ensure that they look at the clock. For a third of the people, again, unbeknownst to



them, for a third of the people, the clock is going twice as fast as real time, for a third of the people, half as fast as real time, for a third of the people real time. And the question is, does their blood sugar level follow real time?

**DR. ELLEN LANGER:** Which is what everybody would assume, or clock time, perceived time? And it follows perceived time. Now it's interesting because placebos, I think, are our strongest medicine. They've been around for a very long time, and people accept placebos and yet don't understand the full importance of all the work on placebos. If you're taking this pill that's a sugar pill, then anything that changes is a result of you not of the pill. And I think it's 27, I may be wrong, but 27% for virtually all diseases. A fair number of people are cured with the placebo.

**SHAWN STEVENSON:** Yeah. The study I just talked about, about 33% of folks in this meta-analysis, had a therapeutic response to placebo. It's so remarkable. It's the power of the mind.

**DR. ELLEN LANGER:** Yeah. Well, we would know about all of this decades ago, if not for these pharmaceutical companies.

**SHAWN STEVENSON:** Oh, that part. [laughter]

**DR. ELLEN LANGER:** The pharmaceutical companies have a very strong motivation to have a drug outperform the placebo. So, since beach back, you know, way back when, in any drug study, you have to test the efficacy of a drug against a non-drug against this placebo. When the two of them do well, which both can be because of the placebo effect, the drug can't be brought to market. So, the drug company doesn't want the placebo to work. So, most people think of placebos as bad, right? Oh, it's only a placebo. Oh, it's only psychological. You know, you don't have a real disease. It's only psychological. Things that have made all this work, all the more important to conduct, to change that idea.

**SHAWN STEVENSON:** Just to circle back with that, with the blood sugar, again, their blood sugar changed based on their perception of time.

**DR. ELLEN LANGER:** That's right. When you saw it going faster, their blood sugar rose more.

**SHAWN STEVENSON:** This makes me think about, again, our perception of time overall in our lives. And right, we have these very strong mind viruses that we've taken on culturally about aging, for example. At certain increments it is like when certain things are supposed to happen, we start slowing down aches and pains and all these things. And with another perspective, like for example, with aches and pains. It's like...

**DR. ELLEN LANGER:** Yeah. Well, you have an ache or pain. How are you going to understand it? If you understand it as a natural part of aging, you're going to expect more, look for more, and then experience. See more aches and pains. In a simple way. If a 20-year-old and I, at 76 hurt our wrists, the 20-year-old knows that their wrist shouldn't hurt. So, they're gonna do things to make their risk better. 76, there are a lot of people who believe, "Look, when you get older, you fall apart." And so if you believe you're gonna fall apart, then you don't take the simple step to make it better. So, then a month later when you're still in pain and that 20-year-old isn't, is it because of your age or because you didn't attend to it in the same way?

**SHAWN STEVENSON:** Yeah.

**DR. ELLEN LANGER:** When you have, let's say arthritis, what you do is overlook all of the ordinary things you do that are giving you the pain. You just assume it's because of the arthritis. Not that you were gardening for two hours or you slept a little cockeyed. Yeah, no, I think that a major problem with illness is for many people, for whatever reason, are looking for validation that they have it. And what they should be looking for are indications of how they don't have it or how it's changing and how it's changing is a treatment plan that I described in *The Mindful Body* that has turned out to be very successful with across lots of chronic illnesses, shall I tell you?

**SHAWN STEVENSON:** Absolutely.

**DR. ELLEN LANGER:** Okay.

**SHAWN STEVENSON:** But I wanna say one thing really quickly, is that, you know, and I want everybody to really understand that thanks to our social conditioning, we too frequently and flippantly attribute certain things to aging that probably shouldn't or we can change that association.

**DR. ELLEN LANGER:** Sure.

**SHAWN STEVENSON:** And in particular, I just thought, like you just mentioned, sleeping in an awkward position. For example, my 12-year-old, not too long ago, he woke up feeling a little bit of creak neck, and, but if that happened to, say my uncle, same thing. They both slept maybe on their stomach with their head turned for hours at a time. We're gonna say, "Oh, you're just getting older uncle Leroy." It's just being able to be, to stand guard to the door of our minds from the environment, but also understand that it's coming from the inside out first. And our beliefs in what we're attributing to things. Not to say that things aren't going to

change, but I'm so grateful one of the coolest things you've said today is that it's an opportunity to do things differently.

**DR. ELLEN LANGER:** Well, not just different, you know, that... We have, I have many, many examples with language and also and from culture and what have you, in the book of here, things are bad. I'll give an example or two. The culture, the experts show you how to make it better. However, there's an even better way of making it. And that's the piece that I don't understand why it takes so long for us to get to. And that's what lots of my work is designed to do. So, well an example that I used earlier is about trying. People, it's better to try than to give up. So, you give up, you try, but trying has built into it an expectation for failure. You wouldn't try eating an ice cream cone, you would just eat it. So, trying is not nearly as good as doing. Hope, it's much better.

**DR. ELLEN LANGER:** This is an odd one. 'cause people think, isn't it good to have hope? When I go down in the morning to get a cup of coffee, I don't hope that the coffee will be there. I expect the coffee to be there. So, hope has built into it also an expectation for failure. And, it's much better if you're hopeless to have hope. It's even better to assume it will all be fine and to create the reality that you want. Forgiveness sounds good. It's certainly better than blame, but there's an even better way of being, which is to understand why the person did what they did. I had been asked many years ago to give a sermon at one of the Harvard churches. I said, yes, what am I gonna talk about? I know nothing about religion. So, then I thought, well, I could probably get by with something about forgiveness.

**DR. ELLEN LANGER:** It sounds sort of religiously in a naive sense. And so, I started thinking about it and I came up with something that shocked them, and it was almost sacrilegious. Here's it in a nutshell, if you ask 10 people, is forgiveness good or bad? What are they gonna tell you?

**SHAWN STEVENSON:** It's good.

**DR. ELLEN LANGER:** It's good. If you ask 10 people, is blame good or bad, what are they gonna tell you?

**SHAWN STEVENSON:** It's bad.

**DR. ELLEN LANGER:** It's bad. But you know, you can't forgive unless you first blame. That's interesting. Our forgivers are our blamers. Now, do you blame people for good things or bad things? Bad things, but things in and of themselves are neither good nor bad. So, what do we have here? We have people who see the world negatively, who blame and then forgive

heartily divine. Okay? So, the alternative is not to blame in the first place, but to understand the sense that that person's behavior made or else they wouldn't have done it.

**DR. ELLEN LANGER:** So, to understand replaces forgiveness and blame. So, it's the better way. Okay? So again, it's always bad. People blame, the world teaches them good people say, "Don't blame, forgive." And then it ends there. I said, no, there's a better than better way. And there's always a better way that, I teach people about three levels and it goes through lots of my work. Let me tell you the way I was first introduced to this about the New Yorker. I don't care about The New Yorker, it's a wonderful magazine. It's just the way of making the point. Level one are people who don't read The New Yorker. Level two are people who read The New Yorker. Level three are people who don't read The New Yorker anymore. You can have a level four who read The New Yorker. The point is, level one and three are both the same.

**DR. ELLEN LANGER:** They're not reading The New Yorker, but they're very different people. Right? Now, the world, this [chuckle] I don't know if you want to add, the world is ruled by level two. They think they know, they see the more sophisticated, enlightened person, and they think that it's a level one rather than a level three. So, what is the bottom line there is rather than assume you know why somebody did what they did, you might assume that there's some extraordinary reason that hadn't occurred to you and learn something regardless of why they did what they did. And I think that all of us judging is mindless in the first place. And Leon Festinger, who talked about and was a great social psychologist way back when, talked about social comparisons as you're sort of you're driven to make social comparisons.

**DR. ELLEN LANGER:** I don't think that you're driven to it. I never asked myself, is your tooth brushing better or worse than the way I brush my teeth? You don't have to make comparisons. They're mindless. We don't know why the person is doing what they're doing. If you and I are in some athletic competition and you win, you don't know that that's the best of my performance. It could have been the weakest of my performance. You don't even know if tomorrow I'm gonna learn some new way of doing this thing. And out... It's, what we need is only to make comparisons that teach us new ways of doing things without the evaluative component. But the world is set up with a sense of scarcity. And here's how the powerful have diluted the rest of us, money powerful into thinking that some have it, whatever it is, some have a lot, some have a medium amount, some very little, and all of that is fixed.

**DR. ELLEN LANGER:** And wherever you land on this normal distribution is the way it should be. Rather than asking the question, who decided the criteria in the first place? Who chose the rules that we're playing? And you change the rules, you're gonna have different winners. And when we recognize that whatever we're experiencing on any level, we're just decisions. Now, for something to be a decision, it means there had to be uncertainty. If there's no

uncertainty, there's no decision to make. So, we have people making a decision to meet their needs, and the rest of us are living out those decisions as if it were handed down from the heavens. I guess what I'm trying to say, people need, I think, to recognize that everything, and I mean everything is mutable, everything. If it doesn't work for you, change it so that it can work for you.

**DR. ELLEN LANGER:** You sort of think about sports. I don't know who it was who decided on the game of golf, but this seems to me outrageous that hitting the ball two inches and hitting the ball 200 yards count the same. Right? But that's the way somebody invented it. That's the way the game is played and accepted. And if you have a very good drive, but you're very bad at patting, you don't have to feel bad if your overall game is not as good as somebody else's because had you designed it in the first place, you would've been better. Tennis, if I designed the game of tennis, you'd have three serves. Two didn't come down from the heavens. There's no you moral reason for two, if I had three, I could kill it. It wouldn't go in, learn from it, kill it again, and still have my backups was served. Everything. It was put there to meet somebody's needs. And everything can be changed.

**SHAWN STEVENSON:** Create social...

**DR. ELLEN LANGER:** And people accept everything.

**SHAWN STEVENSON:** Social acceptance.

**DR. ELLEN LANGER:** Yeah. Everybody accepts everything. And I think, it's fine if it's working for you. But just to recognize the difference in people's body builds height. You know that you take somebody who is 6 '5 and in their family, it's who they're married to, somebody who's 5' 2. They're using the same toilet seat, probably. Well, one of them be much taller or shorter, or not getting their biological needs met. For everything, what is can be other.

**SHAWN STEVENSON:** This reminds me of the movie Big Daddy, starring Adam Sandler. And he haphazardly adopts a kid, and it was the strangest circumstances that he did this under. And the kid one day, he's like he left the kid to hang out with his friends, basically his... The older guys' adult friends. And they're playing cards with this kid. And the kid puts down you know this kinda like... They're just kind of holding him like they're playing poker. And then the kid puts them down. He's like I got a six, a 10 and a Jack. I win. And then the other guys are like wait a minute, I've got this and this. What is this game? And the kid said, I win. No. What is this game called? No, I win. It didn't matter what my hand is. I win. I get to choose the rules. I don't care what's going on with you guys, but this is what I'm doing. And the same thing again, we have these social accepted...

**DR. ELLEN LANGER:** So, no... So, what you have to realize is the more different you are from the person who wrote these rules, the more important it is for you to mindfully adjust them to meet your needs.

**SHAWN STEVENSON:** That's the key. That's the key. And so, I want to close by asking you a little bit more about how we do this. How do we placebo ourselves? And by the way, one quick thing just to reiterate what you shared earlier. Part of doing mindfulness is active noticing. So, we've already got that in our...

**DR. ELLEN LANGER:** That's not part of... That's...

**SHAWN STEVENSON:** That is it.

**DR. ELLEN LANGER:** That's it. That's the it.

**SHAWN STEVENSON:** It is the thing.

**DR. ELLEN LANGER:** Yeah.

**SHAWN STEVENSON:** And...

**DR. ELLEN LANGER:** And, but if you adopt the mindset of uncertainty, if you recognize that you can't know. Right? Not that it's just you, everybody knows they don't know. The mistake they make is thinking other people know. And I'm here to tell them, nobody knows. So, when you make this universal attribution for not knowing, then you naturally pay attention to things. It's when you mistakenly think things are staying still... Your spouse, the fact that you've lived with this person, let's say for 10 years, it's a mistake to think now you know them. And so you stop paying attention. People change. And anyway, so our control over our lives comes about recognizing these changes. And the mind... When you're mindless again, you're holding things still.

**SHAWN STEVENSON:** I want to ask you about the level one, two, and three. Because nutrition is a good example coming into it, not knowing what I didn't know, and then I find out some stuff and I attach my perception beliefs to that thing. These are the rules. This is how it's supposed to be. And then eventually evolving to a place of none of this matters. There's different rules for different people at different times, and being at that level three.

**DR. ELLEN LANGER:** Yeah, no. There are so many examples, many I give in the book, but it's just a fun way of taking in information that people think when they see somebody do something, they know why they did it. They usually say, well, if I... Implicitly they're saying if I

did it it would be because of this. That doesn't mean that's why the other person is doing it. And so, we can belittle them, which we do, and we're mindless if we think we are right. That makes everybody who behaves differently wrong rather than just that it's a difference. So, you can do that with your friends, your spouse, teachers, patients, it doesn't matter, with everybody. Just ask yourself for several reasons explaining why they might be doing what they're doing. And then you know you don't know, we teach this in the funniest ways.

**DR. ELLEN LANGER:** I mean, we have what was it? The prince and the pauper, you know? So, here we have the prince is going to put on clothes of the pauper, go out in the community to see what it's like being a pauper. But there's something ridiculous about that because the worst part of being a pauper is you don't know if you're gonna ever have enough money to eat. All the princess will do is, all right, I've had enough of this game.

**SHAWN STEVENSON:** I'm hungry.

**DR. ELLEN LANGER:** I'm going back to the castle. You know? You can't really put on anybody else's shoes. And what you need to recognize, if you try somebody else's moccasins, as it's called, all you need to do is recognize that you don't know, and then you'll sit up and pay attention to what people are saying about their own experience. But not that, oh, I didn't realize. Now, I know how you felt. At any rate.

**SHAWN STEVENSON:** I want to ask you about this as a tool, because this has been very helpful for me, which is utilizing instinctive elaboration. So, just the questions that we're asking ourselves. And you mentioned this earlier about how we're perceiving a certain event and even something if it's a problem or if something that is causing stress in our lives, but reframing it. And for me, when I have that coming up, I ask, how can I make this fun?

**DR. ELLEN LANGER:** Yes. I think everything should be fun, everything. And I think that the world teaches us otherwise, you know that you have work and play. I think those of us who succeed at our work is because we're doing it in a playful way. I think that people need to take what they do seriously, but not take yourself so seriously. And when you have that easier attitude, it all just sort of comes together.

**SHAWN STEVENSON:** Amazing. Well, you've shared so many incredible insights. And again, I think that, and even as I say, I think like it's different right now, you've changed the temperature in my own mind. And actually I changed it based on my perception of you.

**DR. ELLEN LANGER:** Right.



**SHAWN STEVENSON:** Aah! I feel like Inception right now. Leonardo DiCaprio shout out. But if folks really understand this and you already know this is where things are going, it's already happening. It's never changed, really. But somebody like yourself stood up. And literally, I want people to understand this. You said that study with those elderly men was 1979? This is like around.

**DR. ELLEN LANGER:** Not a long time ago.

**SHAWN STEVENSON:** Yeah. This is around like when I'm born. And you've been paving the way for us and laying down this groundwork. And you even shared the milkshake study several... It's actually in one of my previous books, USA Today national bestseller. That's your student. You're such a remarkable human being. And most importantly for us to take away and really value what you've shared thus far, we have to apply it in our lives. And so, the practicality piece, so we've already understood that noticing is mindfulness, the power of questions and reframing things. Is there anything else for us to be mindful of, for us to utilize as power for us to make ourselves healthier?

**DR. ELLEN LANGER:** I think just recognizing that you can't know, and that makes everything essentially an adventure. That if you've learned to do things mindlessly, which most of us have, I mean, sadly, all of my data over all these many years says that most of us are mindless most of the time. Now, so that... The first thing is that when you're learning something new, don't learn it. The way we learned all those things that were mindless, learn it with an openness, learn it conditionally. It could be this, it could be that, here's one explanation, here are five others and so on. And then you'll be able to be more creative, innovative with that information. For those things that we've been living mindlessly with for forever is not quite as easy to change. And so, maybe the first thing for people to do, excuse me, is to as soon as something is negative, no matter how large or small for them to then question it and then reframe it, you know?

**DR. ELLEN LANGER:** So, the toothpaste for example, it used to be this perennial marital difficulty. Never in my household we would just buy two tubes of toothpaste. But if someone would squeeze from the bottom, if somebody would squeeze from the top [laughter], they argue again, the mindful solution, get another tube or recognize the advantages of both. Not, "How could you be so stupid? Look at all the toothpaste you're wasting. How could you be so patient to take forever to brush your teeth? We have more important things to do. You want the toothpaste to come in." Whatever people are doing has some sensible reason behind it. When you know the sensible reason you stop getting aggravated when you say to yourself that events aren't causing me to be unhappy. If you ask yourself, do I know anybody who in this situation wouldn't be reacting this way?

**DR. ELLEN LANGER:** And you can always come up with something, what are they doing? How are they understanding it? And to see the difficulties as opportunities. So, if we didn't have those little things that squeeze the toothpaste out, that could be an example where rather than be frustrated develop something to make it work. And if I kept dropping glass... My hand just couldn't seem to hold it right, the first thing I'd do is design another glass that's better to hold. And I could make a lot of money with it because my hand, while different from the norm, it's not but if it were, surely there are others that have this deformity or whatever it is. Just to recognize that everything can be different and the difference should be celebrated. And we don't do that in schools.

**DR. ELLEN LANGER:** We tend not to do it in families. And so, my little song that I that I wrote for my grandkids when they were five was, "Everybody doesn't know something. Everybody knows something else. Everybody can't do something. Everyone can do something else." And so, you never have to feel bad if you can't do what somebody else can do because there's something you can do that other people can't do. And when you're strong enough and realize that, then you try to do and so I sang this with my Harvard students. It's to the tune of the... I can't sing to the tune of the old Sara Lee commercial. It's on YouTube. And I started by saying, "Look, I can't sing. I can't carry a tune, but there are other things I can do, and I like singing, so why shouldn't I sing?"

**DR. ELLEN LANGER:** And then I, and all the undergraduates start singing, "Everybody doesn't know something, but... " And I'm not gonna sing it for you now. It's embarrassing... But the point is that if we stop lining ourselves up, you know on this figure out who's better or who's worse much of life just unfolds in a very different way. And the proof of that was with my grandkids. I end the book this way, we are riding and in the backseat, buckled in, and one of them starts whistling. And I say, "Theo, you're such a good whistler." And his brother Emmett says, "Grandma Elle when Theo was learning to whistle, I was learning something else." And that's the way it should be. And then we would all be more mindful.

**SHAWN STEVENSON:** Yeah. Ah, so good. Dr. Ellen Langer, can you share where people can pick up your book and get more information.

**DR. ELLEN LANGER:** At bookstores, online or just go to Random House. I think that it's on my website, which is just [ellenlanger.me](http://ellenlanger.me), but if you put [ellenlanger.com](http://ellenlanger.com), it'll also come up.

**SHAWN STEVENSON:** Oh, you got both nice.

**DR. ELLEN LANGER:** No. I think it just sends it to you. I don't think I have the other.

**SHAWN STEVENSON:** You got both.

**DR. ELLEN LANGER:** I don't really know. I think it's wherever books are gotten. And I hope people read it. Basically, because I've been on this quest for the last 40 years, I have been very fortunate to have had very supportive parents. And so, I've been happy and trying to show people that it really doesn't require as much effort to go from feeling bad about yourself, feeling bad about things, being sick, and what have you as people assume. So, it's part of my quest, so I hope people will share the information.

**SHAWN STEVENSON:** Awesome. We absolutely will. The Mindful Body is available at bookstores everywhere, and of course, your favorite online retailers, and you're the best. This was amazing. Thank you so much.

**DR. ELLEN LANGER:** Thank you.

**SHAWN STEVENSON:** Dr. Ellen Langer, everybody, thank you so much for tuning into this episode today. I hope that you got a lot of value out of this. This is the most important thing when it comes to our health and our success and our happiness in life and all the things that we aspire towards. Our mind is the most important element. And so, having this reinforcement today, all of this incredible research, but also looking at the practicality, it really boils down to the choices that we make and our beliefs about the things that we associate with. And we get to choose those. So, being mindful of ideas, perceptions, beliefs that are not serving us, whenever those associations come up, certain perspectives that aren't serving us, like once you reach a certain age, you're supposed to fill in the blank, slow down, whatever the case might be when yes, we have a vast body of evidence showing that if you use it, you won't lose it.

**SHAWN STEVENSON:** So, working on your speed, your explosiveness, your ability to generate power, actually training those things to keep those muscle fibers and their motor units active, your nervous system, your brain, all those things that associate with these activities. Keep those things active. Yes, truly use it or lose it. We've got a vast amount of data on that, but so often we stop doing those things because life takes over. We start spending a lot of time working and being sedentary and just having this conventional decline in the activities that we're doing. When we're kids we are all about play. And just as time goes on, and also our society conditioning us to stop playing. Literally, this is something that we would say in the environment that I come from. Stop playing. You play too much. Who are you playing with? Right? These different terms where playing is associated with something negative, when in reality there's this great quote that says that we don't stop playing because we get old.

**SHAWN STEVENSON:** We get old because we stop playing. And so I'm encouraging you to flip that on its head. I want you to play too much. I want you to play with me, [laughter] I want

you to start playing, not stop playing, start playing. Give yourself permission, and changing that mindset, reassociating, being able to understand, I control how I think about these things. I get to choose and my body is going to respond accordingly. My biochemistry is going to respond accordingly and keep conditioning yourself into beliefs that are serving you. This includes the environment around you to make it supportive. It just makes it easier. So, attuning yourself to empowering messages, listening to shows like this, getting yourself around friends who encourage this type of mindset. All of these things help to stack conditions. Creating an environment around you that helps you to remember maybe it's putting up certain messages on the wall, whatever the case might be.

**SHAWN STEVENSON:** Create conditions to help you to think the way that you want to think, to feel the way that you want to feel, and to do the things that you want to do. If you've got a lot of value out of this episode, please share this out with your friends and family. Of course, you could take a screenshot and share it on social media, share it with your audience. You could tag me. I'm @shawnmodel on Instagram. I always love to see the shares on social media. And of course, you could send this directly from the podcast app that you are listening on to a friend, family member or someone that you could share this love with. We've got some epic masterclasses and world class guests coming your way very, very soon. So, make sure to stay tuned. Take care, have an amazing day, and I'll talk with you soon.

**SHAWN STEVENSON:** And for more after the show, make sure to head over to [themodelhealthshow.com](http://themodelhealthshow.com). That's where you can find all of the show notes. You can find transcriptions, videos for each episode. And if you've got a comment, you can leave me a comment there as well. And please make sure to head over to iTunes and leave us a rating to let everybody know that this show is awesome. And I appreciate that so much, and take care. I promise to keep giving you more powerful, empowering, great content to help you transform your life. Thanks for tuning in.