

Diet Doctor Podcast with Audra Wilford (Episode 43)

Dr. Bret Scher: Welcome back to the Diet Doctor podcast, I'm your host Dr. Bret Scher. Today we have a special interview with Audra Wilford. She's the cofounder of the MaxLove project. Now this is an amazing and powerful story that could have been a heartbreaking story but instead turned into one of the most uplifting and motivating stories that I've heard in a long time.

She got the diagnosis that nobody wants that her four-year-old son had a brain tumor and somehow through this process, through this process of initially being lost and confused was able to turn what could've been a tragedy into an opportunity.

An opportunity to really transform healthcare as we know it, to get culinary medicine into part of cancer care and into part of just care in general, specifically focusing on whole foods with a component of low-carb and ketogenic diets to help the patients not only treat their disease but treat themselves.

And then that also evolved into lifestyle therapies in general, not just for the patient, but for the whole family and the building of this community, what they have accomplished is fantastic and the message of paying it forward, the message of giving back is a message that we can all learn from. So I really hope you enjoy this very powerful and touching interview with Audra Wilford.

Hi everybody, quick break in the interview here. I want to talk to you about exercise. How do you feel about exercise? We've heard it time and time again, you can't out run a bad diet, and there's definitely truth to that, but the flipside of that coin is exercise is still important for health, for strength, for longevity, for health span, for so many other different reasons. But how to get started if you're not already an exerciser?

Well, we've got a course designed specifically for you. It's called the "Let's Get Moving" course and is free for Diet Doctor members. So go to [DietDoctor.com](https://www.dietdoctor.com) and look up the "Let's Get Moving" course to get you started on your exercise journey.

It's designed for people to help you learn the basics, it's got a low barrier of entry, so you don't have to go pump iron at the gym, you don't have to go run marathons.

It's a much easier way to get you started on an exercise program that's going to benefit your health. And as long as you're paying attention to your nutrition and following a low-carb diet, it's probably going to work synergistically to help with weight loss, specifically with fat loss or maintaining lean muscle mass and promoting health. So check out our Let's Get Moving Course to help you get started on your exercise journey. Now back to the interview.

Audra, thank you so much for joining me today on the DietDoctor podcast.

Audra Wilford: Thanks so much for having me, it's an honor.

Bret: Well it's an honor to have you and as I've learned so much more about the MaxLove project since been introduced to you, it's maybe even more excited to have you on to spread your message. But it starts with, as a father, a heart wrenching story. Like ever since I had kids I can't even listen to stories of kids being sick, or being ill or having a diagnosis, but you had to deal with that firsthand when your four-year-old son Max was diagnosed with a brainstem tumor, a brainstem glioma.

And it almost makes me just want to cry even thinking about it and somehow you were able to go through that journey and turn that experience into an amazing opportunity to help educate the world really about navigating a cancer diagnosis and what can be done from a patient and a family support perspective. So if you can, sort of walk us through that whole journey. I know it was a long arduous journey, you don't have to hit on all the points of it, but give us the sort of the highlights of what got you through it, how you got to this point.

Audra: Absolutely, thank you. So Max was diagnosed August 5, 2011 and that's about eight and a half years ago now with a brainstem glioma and he presented with a number of symptoms: loss of balance, he wasn't able to identify letters anymore, he wasn't able to read, a lot of regression, and then early morning headaches and vomiting. And of course as a physician you know what that's a sign of.

Bret: It's trouble.

Audra: But he would wake up at five in the morning screaming in pain, he would then vomit for a number of hours and then pass out. And so we took him to the doctor three times for this and we were told he has a sinus infection.

Bret: Oh boy.

Audra: And I looked it up on Web M.D. and the final bullet on the page for these symptoms on Web M.D. is signs of a brain tumor. But I didn't want to be that mom to walk into to the doctor's office with a Web M.D. printout, so I resisted. And finally we did get him an MRI. And I thought he had an inner ear infection and I had no idea that children had... were diagnosed with a brain cancer.

I had heard of leukemia but as a parent I didn't know what happened within the walls of the Children's Hospital that was up the road from us. I had no idea. And at that moment I was inducted into a family and a community a club, if you will, that no one wants to be a part of.

But we were told that Max had a life-threatening condition, he had severe hydrocephalus, his brain was hemorrhaging, and he was rushed into emergency surgery and right after that I think strangely enough the biggest gift that we were given while Max was still intubated, post-surgery for days, our neurosurgeon came into us and he said, "You're going to start talking to oncology, and what they're going to present you with, our options to try to get more quantity of life and at some point that will compromise the quality of his life, and I'm going to ask you to agree with me here that at that moment we stop treatment and you simply focus on his quality of life."

Bret: That's a difficult thing to have to confront for sure.

Audra: Really difficult. And I know that at that point my husband heard, "Well, great, he's talking about palliative care." And what I heard was, "So you're saying there's something I can do."

Bret: You're saying there's a chance.

Audra: So I found incredible empowerment in the quality-of-life conversation and I looked back on that, no I think it was the biggest gift that we received, was a physician who was willing to talk with us about the quality of our son's time.

Bret: I want to get into that, but I know-- sure a lot of people are on the edge of their seats wondering how is Max now so I want to cut to the chase that he's 12 years old and he's in school, he's thriving in school--

Audra: Right, seventh grade, he was three grade levels behind at one point after chemotherapy through radiation. He is now up to grade level, he I think has a 4.0 GPA even.

Bret: Wow, fantastic.

Audra: He is thriving. He is still fighting active disease and it's something that-- I mean we didn't expect to have this time that we've had with him. So we were grateful for each day.

Bret: An amazing perspective. But so let's walk back through the process though, I mean you're given a diagnosis, an emergency surgery and you used the word empowered, but I think in the beginning it's got to be so disempowering to say, you know, we're at the whims of these treatments and we are sort of swimming in the sea and don't know what to do. I mean did anybody talk about nutrition or lifestyle when he was past sort of the life-threatening par?

Audra: No.

Bret: And did anybody talk about sort of care for the parents?

Audra: No.

Bret: So looking back it seems sort of amazing that they wouldn't, but that's sort of a lot of the culture that we're in when it comes to this type of thing. It's all focused on survival, here's the treatments, you know, do it and best of luck.

Audra: Great point. In fact that first night in the ICU I had a migraine... it was the worst night of my life. And I asked for something to help. And the nurse looked at me, she said, "Mom, there is nothing we can do to help you."

Bret: Wow, oh my God! Is that really what the answer was?

Audra: You think this is the system. And maybe you think, why can't you admit me too? Take my insurance so that you can give me an ibuprofen, you know, at that time. But it's very, very telling and it's a part of the way that our system-- it's one of our opportunities, let me refrain this, it's an opportunity in our healthcare system. When we can care for the whole family we can start to make such a measure-- an immense positive change in I think the health span of the patient.

Bret: And not to diminish the care that he got. I mean the surgery is amazing.

Audra: State-of-the-art.

Bret: The surgeons were phenomenal.

Audra: The best.

Bret: And the nurses care in the ICU and to making sure, you know, he doesn't get infections and he heals appropriately and he recovers appropriately in the hospital. I mean all that care is so necessary, but it doesn't have to stop there. So what did it take for you to sort of realize there's more that we can be doing here?

Audra: I think that's the best point, I really do want to emphasize that as well, that the care that we receive in the healthcare setting, in the hospital setting, is doing what it's been designed to do, which is to save that life at that acute point. But what we're starting to learn is that a cancer diagnosis is not just an acute diagnosis.

This is something that is-- there's long-term care involved in this. And I think that that was a perspective shift for our family at the very beginning which was to learn that our son was diagnosed with cancer and we have this acute moment of focusing on saving his life but it was going to require so much more than that. And so what happened for us, I've been a cook in the past, and so I had good culinary training and I just knew that the seed was planted with quality-of-life.

What does that mean for us? What can we do? And I thought, what can I cook for him? We've got to be able to deal better with this. And a friend of our son has the book *Anticancer, A New Way of Life* by Dr. Servan Schreiber. And it's a beautiful

memoir, an amazing book and it really does speak to lifestyle medicine in brain cancer, sort of a brain cancer diagnosis.

And I think that's what set us off on the path initially to start, was focusing on where we could be empowered in the journey. Prior to becoming a cancer mom, I was a leadership educator as well and one of the things that I really focused on was the concept of being proactive and what we can do in a situation where my son was victimized by cancer in a moment in the moment of diagnosis, absolutely a victim of cancer.

But after that we have the freedom to choose our response. Who we want to be in this? How we want to show up for him? How we respond to this trauma is really up to us. And so we really focused on that trying to figure out how to make cancer give and do more. We immediately focused on giving back and we immediately focused on how we could help our son thrive through this process.

Not knowing how much time he had, not knowing what the course of treatment would be like, not knowing what the outcomes would be but how could he thrive day-to-day. And those were the factors that I think influenced us. In some weird way something you're never ready for I felt ready for in a very, very strange way from-- You know, peaks of the life experiences we have.

Bret: Right, in a strange way, you were trained for this. Especially with your culinary background and your leadership background. So when it came to the culinary part of it, did you come to like a low-carb or keto approach or, you know, were there lot of stops in between? And like how did that transition evolve?

Audra: So many stops in between. Max initially was in the hospital for four weeks, he came home paralyzed, went straight into chemotherapy and was too young for-- the treatment plan was let's stall the disease to the point where we could get him to be old enough for radiation therapy. Very conventional approach.

And so I made every mistake you could make when it came to modifying his diet and cooking. So we started with removing all added sugars. We read about Robert Lustig to get; this was in 2011, it was fairly early. And so we read everything that we could. With thought, we can remove added sugars we know that's a problem.

And somebody mentioned to me at one point, "You know, these grains and starches metabolize and basically turn into sugar." And I'm Italian... there's no way you're telling me we have to stop having noodles. It was pretty mind blowing to me. So we were fortunate in many ways to have the time to make the mistakes and to uncover what was going on.

Max's tumor is not a glioblastoma and it's something that we found out along the way, we were able to carve out some time, we had time to make the mistakes, but the commitment we made very early on was that any other family who comes into our community wouldn't have to make the same mistakes that we made.

And I wanted to be able to advance this for others, so that where we started at step one, they could start at step 10 and not have to go through the same mistakes. It's also a very expensive process. We were fortunate to have a beautiful community that stepped up to support us, my colleagues at my job at the college that I worked at gave me a year of time. Their sick and vacation time, pulled it together so that I could be with Max for that year. So I walked into that time saying, we've got to pay it forward, there's got to be a way that our learning could benefit others, especially because we are on a non-conventional path.

And we built a community in that time. What sort of happened is that we started gathering with parents who identified the same opportunities in healthcare to bridge those gaps. Again it's understanding that this is a space of acute care, but what about the health and well-being of our children and of our families? And together as parents we started bridging that gap together.

Bret: I love how you phrased that - the opportunities in healthcare - and how you build a community around that, I think it's so powerful. But interesting when it comes to altering the diet of a child who is ill or has a diagnosis, I think the initial response is don't deprive them of anything, give them everything they want. We just want them to be happy and we want to support them.

And happiness is a big part of it and a lot of the times that takes the form of you know sugar and cookies and sweets and hit those dopamine receptors and make them feel good. And this is sort of the opposite of saying, we want to protect your

body and your healing more than hitting those dopamine receptors who are going to restrict all those things and take those away. Was that a challenge at first?

Audra: The really wonderful point-- I love that you are talking about the dopamine receptors, because what you're talking about is unfortunately we equate happiness with a temporary state of potentially maybe elevation. That's not true happiness, right? Happiness is a state of being, it's a longer term than that.

So we I think immediately knew that we are focusing on provision of quality time for our child. And we really had to change the narrative for ourselves first. And that was 0.8; 0.8 is not the nutrition part of it, it's the mindset shift. And it was saying, we are not depriving. And we had to go to our grandparents for example and say we're not depriving him of anything, we are providing the highest quality of life; this is such a priority for us.

And those moments of happiness with a cupcake, as they could potentially shorten his life span as they could give less quality time, as they require then at some point that he is on steroids and a number of other drugs because we are creating an environment for him that is less-- he'll be less healthy. What type of happiness comes from that?

Bret: Right.

Audra: So we had to take it-- it's a longer game. And actually help people in our family and community learn that a cupcake may give a momentary smile, but what about sitting down and playing a game with him or reading a book or something else? And so does take a big mindset shift to get there.

Bret: Yeah, but you had to investigate all this and learn all this on your own. I mean, this wasn't something that was presented to you. So as you were navigating the field of alternative cancer therapies, I mean there's so much out there, right? There's things about colonics and IV vitamin C, or different IV treatments and things like acupuncture and hypnotherapy and low-carb ketogenic diets. How did you-- how where you able to sort of navigate that field to say what's going to work, what is worth the effort here?

Audra: It's actually one of the pain points that MaxLove project is addressing is the stress that comes out of parents and families being confronted with the alternative medicine world. It's pretty stressful. So you have the conventional world on one side and conventional medicines and there's nothing else that you can do; show up for treatment, say yes to what we do and that's it.

And then you have the alternative medicine world; folks saying you're killing your kid by doing standard of care. You should be doing A, B, C, D, E and F or things that FDA hasn't approved that is only available in Belize or whatever it might be. Very stressful to hear from folks that you are killing your child by doing what has a base of evidence to it.

Bret: Right.

Audra: We can't deny that. If you want to cite the evidence in complementary medicine, we have to be symmetrical in our comparisons, right? And so we actually created a Gmail account and when we received messages from people, we would say, wonderful, thank you so much for your input, please email this account and we'll hold it there. And we just put it to the side and did our own investigating.

So what we looked at was how can we improve his quality of life, where is their data somewhere, somehow, that demonstrates that this could help our kid without doing harm? And as we want to take in all of the above approach, show me everything that could help. And in that space we found our own plan and that includes acupuncture, traditional Chinese medicine for us, and nutrition, absolutely a huge part of it.

But we did have to sift through various ideas of complementary therapies and I think a lot of this comes down to the threshold for the family, what serves you as a family. It's not going to be the same for everyone. But what we did was we teased through the evidence and now we help other families do the same. There are other organizations that focus specifically in alternative medicine and we are not that organization.

We are focusing on something where we feel there is a good enough base of evidence, good research, peer-reviewed studies, so we have kind of a foundational approach to that, that we feel like is important. My husband has a PhD in public

health, he has been coming through the med libraries and things like that in his works so I think that's helped us a lot with our information competency when it comes to really breaking down the studies and the data.

But the first moment for me that was really pivotal for this was somebody gave me the book, *The China Study*. I was in MRI with Max waiting, and, you know, reading this book... It was stressful. I started to think and feeding him dairy and I am killing him, right?

Bret: It needs to be vegan.

Audra: It needs to be vegan or whatever might be, it's one of the biggest challenges that we see. Is just an association of health with a particular dietary philosophy, or plan, or whatever it might be. When you break down *The China Study* and you actually look at the study, you start to see all the problems. So the main thing is don't eat casein from a lab at very high percentages and then also inject yourself for the carcinogen.

You know, that's the only lesson from that. But there is such a motion and vitriol, and the suggestions out there from the world can be really devastating to a family that's already experiencing trauma, loss, financial instability, on and on and on. So we try to de-escalate the stress in those situations and we have experienced it ourselves personally and find what is empowering in this base, what seems to work for us and serve us.

Bret: So, have you been able to maintain Max on... or has he been able to maintain himself I should say on a ketogenic diet?

Audra: Yeah, absolutely. So 6 1/2 years now he's been on a ketogenic diet in one way, shape or form, or another. So he's been on anything from something of a more therapeutic ratios if you will to a maintenance plan that is less therapeutic in the ratios, so where he would have lower levels of ketones, but still be on a very low-carb approach.

His dream is to live on a low-carb diet long-term. He has experienced a therapeutic ketogenic diet and for him he misses the protein. So he would like to have a low-carb

diet going into adulthood, but it's been instrumental, I mean in his plan it has the ketogenic approach we have used alongside standard of care and with phenomenal results. We feel like his quality of life has been amazing after every surgery.

He actually just had a brain surgery on November 25th and he was doing... eating salmon three hours after the six hour surgery and he was doing squats the next day and the team said this is just unreal how can someone recover from a surgery like this. So it's not just about enhancing treatment efficacy or combating, you know, the cancer. It is also about that powerful quality of life that comes from being well. So we treat them as if he's an athlete, more than a patient.

Bret: Right, you need recovery and you need just overall health and vitality to get through all the treatment whether it helps the treatment or not; yeah, that's a great point. And I wanted to touch briefly what you said about the therapeutic ketogenic diet, which is different than what most people eat, just as a ketogenic diet for sort of normal health benefits.

Because those diets need to be higher in fat and lower in protein. So sort of the 4:1, four times fat as compared to the protein and carbohydrate combined, so the very specific version of the ketogenic diet. And a ketogenic diet which he sounds like he's transitioned to is more of sort of the moderate protein low-carb and variable fat type of diet.

Audra: Exactly.

Bret: So that makes a lot of sense. So now that you're at this point where you've you really done so much learning and growing from this experience, tell us how the MaxLove project originated and where it stands now. So what are the things that you do to help families?

Audra: This is quite a complicated story for us because it's so intertwined with Max's story so I appreciate being able to tease it out a little bit separately. We started MaxLove project about three months after Max was diagnosed.

Bret: That soon?

Audra: That soon. And it was because we found-- The first thing that we focused on with him other than mindset and nutrition was actually sleep. And so we found a therapeutic nightlight that just worked wonders for him and we wrote to the company and asked if we could provide them to hospitalize kids and the company Cloud B wrote back and said, "We'll give them to you. Please go forth and, you know, spread the goodness."

And I thought they'll need a receipt; I'd better start a nonprofit. So actually when we started MaxLove project it was intentionally not MaxLove foundation or anything like that. It's a project because we're doing something very active to support others and we saw this as an opportunity to solve a problem, drop the mic, move on to the next problem. So we're very intentional in being a very active organization in that way.

But we started out as a service project. And you know, I thought the company it's going to need a receipt, I'd better start a nonprofit and started it for that reason. But within a year of distributing these twilight turtles, these nightlights, really helping Max grow as a person while going through this process, it became really clear that we needed to do more and we started showing up in a different way.

So while started as a service project, it pretty quickly transitioned into something that is designed to fill that void that we found in our own health care with this community of families and advocates that we had built. So I started offering cooking classes in the community. One of the things that that presented was how is Max doing so well... he didn't need blood transfusion going through chemotherapy.

He never had a neutropenic fever that results in hospitalization. I mean he was super well. So I started offering the cooking classes to share how I was transitioning his diet and food and sharing the knowledge we were building. We started to build educational materials and send those out and really started to build that platform of creating community with the families that we serve.

And now, gosh, probably 6 1/2 years after being at that point, we have a number of Children's Hospital partners, we have a mobile teaching kitchen, where we have a really unique culinary medicine program specifically for pediatrics. No one else is

doing what we're doing. We have-- this program is tailored for the needs of hospitalized kids from the NICU to the PICU and all the clinics in between so--

Bret: Yeah, let's talk about that for a second. I mean that's amazing but I can imagine you coming in and saying, "We are going to teach these families how to cook and what to eat", when the hospital food is a glass of orange juice, and the pancakes, and the waffles, and the cereal. My guess is your message of what you should be providing for your children is very different. So was there initially a little bit of pushback? That, "I'm not sure we want this message here"?

Audra: That's a really interesting point. The pushback for the hospital so far actually has more to do with safety fire code regulations and things like that. And what we're finding though is that as we get the program into the hospital and we are working with real food and you can start to smell the aromas of fresh herbs and lime and all of these wonderful things, you'll have folks walk by, pop into the class and say, "That smells amazing, this is great.

How can we get this?" It's infectious. So for us it's actually been kind of a Trojan horse, a good Trojan horse. And so what we're doing is sneaking in real food. The conversations on health and wellness have now pervaded the hospitals we work with. So we're working with associates-- so the HR department for example is utilizing the program for their wellness program. Because one of the biggest costs to any hospital is actually their own healthcare cost for their own associates, right? So we are a part of that answer--

Bret: Interesting transition. Starting to help the kids who are the patients and then ending up helping the employees and the workers as well. I mean that's powerful.

Audra: And how incredible is that when those employees come back around and say, you know, real food has helped me too. So as the entire culture in the hospital starts to change, what then happens is it begs the question, why are we providing this...? I'm not going to even call it food... these products to our patients? The clear liquid diet is 100% carbohydrate. Kids who are healing, the most inflamed, the most in need, they are getting the least nutritious food possible.

Bret: Right, and they are usually getting the liquids because their body can't handle the solids at that point, which shows how much healing they need to do and you are giving them pure carbohydrates.

Audra: So we're-- I really feel like this program coming in is something that is making a beautiful transition in the hospitals that we're working with. So right now we're working with a number of Children's Hospitals and creating this curriculum ourselves. We are creating it to be an open source... so basically it's going to be protected with a Creative Commons license that will make sure that anyone can utilize it but just not commercialize it. So we're producing it for the greater good.

One of our partners is the University of Arizona and their nutritional sciences department. They have students testing all of our recipes right now in a lab and so these are nutrition students who are supercharge about culinary medicine. They are learning and that's just... the most wonderful thing to me to see is just the layers of evolution and learning and growth among everyone involved.

And what I found in all of our partners is that people want to do better. They want the system to serve patients better, the clinicians we work with are almost desperate for something to give their patients to improve their quality of life. They're tired of seeing poor outcomes, they're tired of the misery, they're tired of the pain, they're tired of seeing their cancer patients who are five years post treatment and struggling to hold down a job, they're struggling with obesity and diabetes, secondary cancers are late effects of treatment, because they don't have a true health and wellness paradigm in place.

Bret: Yeah, that's a great point. I mean the initial cancer treatment may stop, but the health battles do not stop and those continue, and those need to be addressed. So you mentioned the term real foods, that this program is emphasizing real foods. Is it by default then low-carb? Do you use the word keto/low-carb? Do you give options? Like tell us a little more details about that.

Audra: Absolutely yeah, so we give options. So we meet families where they are. And there's such a spectrum and a variety there of needs. And so we believe that a metabolic approach here for any disease state is the most important thing. And that

when we come to real whole foods, when we focus first on real whole foods, we automatically help families get closer to whatever their goal is in that space.

The biggest need that we see with almost any hospitalized family is going to be-- there's a high utilization of processed foods. So if we can make that first step into making utilizing whole foods powerful, then we're getting somewhere. So the reason why culinary medicine as a term is so significant to us, is that what we've seen-- I went to culinary school, I learned the skills.

So when it came to modifying food for my son I had a significant skill set to do it and still was frustrated. I still came up against raw box. I thought what is a mom when she doesn't know how to cook or like to cook?

Bret: Right.

Audra: And you have kids... Do they have any culinary education? In the school, anyway?

Bret: In the school no.

Audra: No, it has to happen at home.

Bret: Yeah, I mean those videos where people are going to the schools and they hold up different vegetables and they say, "What is this?" And the kids are just getting that blank stare because they don't see vegetables, they don't handle food, they don't know what is supposed to look like.

Audra: So this is profoundly disempowering when you are faced with a health crisis. And that's our standard American environment. We are so distant from our food and food sources and understanding and now we're three generations in to some families who have never cooked. So a part of the answer is to combine cooking skills, that culinary knowledge, with the process of understanding and utilizing whole foods that really is the magic, that's what we need.

We need it in our schools, we need it in our libraries, we need it in our hospital, we need it everywhere. But we're taking on our little chunk of that and if we feel like we can empower families to do a little bit more in the kitchen and start building that

interest and knowledge base, then we will start accumulating positive health behaviors and it's going to only escalate the good for a family. So that is kind of our basic foundational perspective; we call it fierce foods.

Bret: Fierce--?

Audra: Fierce foods.

Bret: Fierce foods.

Audra: Because kids don't like healthy. And actually talking about terminology, I mean parents don't... I mean how many of your friends... I mean, like, let's go to this healthy place that's just opened up down the street. I don't know, you know.

Bret: Doesn't sound very fun.

Bret: The connotation isn't great. So we're working with a positive connotation, we are talking about really powerful fuel in your body for a variety of different reasons and it seems to really resonate with kids and families more than the conversation around healthy. I mean, is this food really healthy? It's nutritious, right? But your state of health is something that is a much larger question and opportunity.

So that's our foundational approach, we then have opportunities to grow in that. So for some families, there are many families who would really, really benefit from a therapeutic ketogenic diet or some version thereof, or really great low-carb approach. And we work with families personally and directly to help identify what's best for them. And it's really different for everyone. But we start with a platform of whole real foods and then we go from there.

Bret: And I can just imagine as the doctors see this taking place in their hospitals that they then are going to bring this up to the patient's marks, I know that was something that no doctor brought up with you. You had to do the research, you had to bring it up and the ultimate goal would be that this is just part of the treatment plan that when you sit down with your doctor that the doctor includes this in the treatment plan, so you are starting to see some inroads there as well?

Audra: That is exactly the goal is to enhance standard of care with the health and wellness roadmap, that goes right along your traditional roadmap. And can actually help mitigate directly some of the effects that you see in the traditional roadmap. And what if we could lower the toxicity of treatments, even lower doses, because we're on a health and wellness plan.

My son didn't need steroids going through any of the treatments he had, like radiation for example, because he was on a ketogenic diet and he did beautifully well not needing that medication.

Bret: Yeah, that's amazing. So, for the listeners, steroids are commonly given, because with the sort of damage or the injury to the tissue there can be swelling and steroids are potent anti-inflammatory, they decrease the swelling. But they're going to drive glucose up, they are going to increase insulin, which are going to have potential negative downstream effects. So if you can take care of the healing process with nutrition and not need that--

Audra: It's a big win, right?

Bret: Yeah, it's a big win. Now, not that there's research behind that to say that it can happen, but sure, it makes sense and certainly worked in this case.

Audra: Right, and our doctors followed the evidence in some of the ketogenic research. Dr. Shack's research for example. But that is something that we're seeing a change in. So when Max was diagnosed, we asked to have a dietitian on the team. They said, why would you want to talk to a dietitian? He has no clinical deficiencies.

Bret: Right, nutrient deficiencies... that's what... you look at. Does he have a current nutrient deficiency, not what can we do to prevent--

Audra: I said, we want to prevent it though. They said, well okay fine, we'll have a dietitian come in on the first meeting. I said, how do I get-- I don't know, I don't know, but I think he might need more kale or tell me, you know, what he needs, but do you have smoothies, do you have shakes, what can I give him? And I was handed a shake menu that consisted of Carnation Instant Breakfast.

Different versions, like ice cream Carnation Instant Breakfast, sweetened milk... it was all sugar and some fat, but it was basically all sugar. And I looked at that and I said, I've read that York Times article that just came out in January with Gary Taubes, like, you know, the Robert Lustig, Is Sugar Toxic... This isn't making sense for me just as a normal parent, you know.

Questions about this as it was or as it stands and today same hospital when a family is diagnosed, they have their oncology dietitians are fully versed in the ketogenic diet, and the shake menu now includes avocado and whole foods blended. It's a totally different scenario.

Bret: What a wonderful example! To see what you've done, I mean this is change because of what you've put in place. I mean that's phenomenal.

Audra: We have to figure out how to scale it and that's the thing that we're working on right now with this hospital-based culinary medicine program. Is how to scale the change.

Bret: And is that the Charlie Cart as well?

Audra: And so that is-- we originally started that program called the Charlie Cart and we originally started actually working to see if their curriculum-- if their own curriculum is feasible in a hospital setting.

It's used in schools and a lot of community organizations, they do a wonderful job, they are an amazing organization, but we ended up really deciding as a team and this is our culinary medicine collaborative and we have partners from Willette Children's Hospital in Savannah, CHOC Children's in Orange County California and the University of Arizona working on this together.

We decided we need to make our own curriculum. So we're now using a mobile cart that is actually a little bit different and it's lighter and it's just structured differently. But we're learning, because we have to deal with hospital fire code regulations and sanitation and on and on. There are a lot of layers.

Bret: Sure sounds like it. And then in addition to the whole nutritional cooking aspect you also have the Ohana project.

Audra: Thank you, yes.

Bret: So Ohana in Hawaiian, which I learned from listening to your talks, means family. So this is a project designed to support not just the patient, but the whole family. So tell me more about that.

Audra: This is something that we've learned in our journey. We started out with this nutrition platform and we quickly learned that there's so much more to it than just nutrition. That when you're in a space of-- if you just look at one's macronutrient intake, you are missing a good most of the picture, right?

We quickly learn that mindset is important, that mindfulness stress reduction, significant sleep, physical activity, our community... there is significant research to show that our communities are therapeutic.

Bret: Right.

Audra: The sort of environment that we're immersed in, how we can mitigate the toxicities in our environment around us, all of these things are really important to us. We call that our B super action plan. And that is our foundational action plan for thriving, for health and wellness for the family.

The other thing that we learned is that there's no patient, a child in isolation, that we thrive in communities, but in family units and so providing care designed simply for the child is really not quite effective especially when it comes to lifestyle medicine and health behavior change.

We started to learn a lot about a trauma; trauma in the family, trauma for the parents, grief that-- unaddressed grief from the beginning when your life changes overnight leads to a good amount of PTSD and resulting traumas and difficulties that make it very difficult to engage in lifestyle medicine health behavior change.

So we started to build a lot of programming around this. You know, acupuncture for the whole family for example and a lot of our programming is designed to support parents. We have a support group of over 1300 parents--

Bret: 1300!

Audra: ...online. And we provide significant social support to the parents but also evidence-based research and targeted interventions. We have boot camps that are fully online, we have mindfulness boot camps for mom and for dad, they are separate actually, we have a number of empowerment workshops, just programs that we offer to really focus on how we can be empowered as a whole, as a family on this journey.

So the Ohana project came out of that. We actually had a-- it's an IRB approved study with the Children's Hospital of Orange County and we delivered a core set of services to the whole family, included health coaching and nutrition, cooking classes, acupuncture for the whole family, yoga for the whole family, health education, health behavior education workshops and we found significant improvement to quality-of-life.

My husband who teaches at UC Irvine in public health and health behavior change designed and assessed this study and he can speak to the results beautifully so much better than I can. But really at the end of it, what we found was significant improvement in quality of life and a whole host of different measurements.

We see this as the potential and the future of healthcare. It's really functional medicine at its core I think in many ways and designed to support and serve the whole family and this is when we start to see real changes for patient short-term and long-term.

Bret: Yeah I can imagine on so many different levels, because one, if the parent is leading by example, the child is going to learn that so much better than just being told to do something. But also the better the parent is taking care of themselves, the better they are able to lend support to their child and to lend support to each other and I just think that's so important.

And I mean you really are changing the face of healthcare and certainly cancer care and healthcare in general by implementing this... I mean it's amazing.

Audra: It's a huge paradigm shift. And we know that the most at risk people for cancer in this country are people who survived cancer. And what do we need to do to change that paradigm? And it is really looking at how we can be optimally well and

living our best days possible, you know, with the time we have, whatever that might be.

And this is done in a family unit. And we had so many parents come through our programs, saying, we entered in this for our child, but this saved us, you know. I didn't know that maybe I had metabolic disease, I didn't know that I could reverse my obesity, I didn't know that I could address my type 2 diabetes this way. And you start to think there's a glimmer of hope at that point that this is what we need in our healthcare system. This is exactly it.

Bret: Right, and the lessons your son must have learned going through this about giving back, about paying forward. I mean those are lessons we all need to learn.

We get so wrapped up in our own lives about how busy we are and the things we have to do and how terrible the things that we're confronting are, they are nothing compared to what you had to go through and the way you were able to turn this around and the lessons you've learned and the lessons Max has learned. I mean it's a remarkable story that I think everybody needs to listen to and help themselves in the perspectives, their own thoughts about how they interact with the world and give back to people into perspective.

So you never wish that anybody goes through this, but you certainly wish if they have to go through an experience like this that they can turn it into something exactly like you have and that's remarkable and very commendable. So thank you for that, for sure.

Audra: Thank you so much. That was a powerful part of our story here, was empowering Max to not see himself as a victim, but to feel empowered. And I don't know if you've read Sheryl Sandberg's book *Option B* with Adam Grant.

It's such a powerful book and part of that is the empowerment that comes from giving, especially when facing grief and loss which in any journey that's like a child cancer journey, even when a child survives there's grief for the life that you were lead-- the way that life changes, there's grief in that as well. But we also have a significant number of bereaved families we work with.

So in addition to the social support that we provide, online support, the cooking classes in the hospital and the community, we provide a good amount of social support based services directly in our community, and that includes a good amount of work in bereavement. And once a family starts with MaxLove there's never a point where you're excluded. We are always in our family and that includes the entire timeline.

And our focus on quality of life extends to the entire family. And so after a child dies from cancer or something related to the treatment, you know, the family is usually left with nothing. The support system that was there when the child was in treatment is gone.

And we will always be a family and we will always be there for these families and everything that we do in our B super action plan applies to a family from day one of diagnosis through the grief and bereavement process and it's all about optimizing our quality of life and living the best days possible with the time that we have and whatever the cards were dealt.

Bret: Right, wow, such an amazing message. And I'm so glad I learned about you and I learned about the MaxLove project and all the amazing things you're doing. So if our listeners want to learn more if they want to know how they can contribute, if they want to keep up with all the latest things, the amazing things you are accomplishing, where can they go to learn more?

Audra: They can go to maxloveproject.org. We're also on Instagram and Facebook under MaxLove project and I just want your listeners to know that they really, really matter to our movement. Not only in their ability to amplify our messaging and, you know, show support to us in social media and things like that, but in their own individual journeys, by modeling the way, by bringing this focus on quality of life and of health optimization to the mainstream.

You are helping children fighting cancer and rare diseases and those immersed in the healthcare setting because we need to change the entire environment. The standard American environment or standard any other kind of location environment needs to transform for all of us.

And so the folks that are involved with Diet Doctor which is one of our primary sources actually for our families. We love what you all do. And your listeners, those who are participating, are really active agents of change for us. We depend on everybody to elevate this base and to bring the messaging forward so thank you.

Bret: Yeah, my pleasure. And can people contribute to your cause either with their time, their energy or their money?

Audra: Absolutely, time talent treasure, all of it matters and we have a volunteer link on our website that includes being active on social media just helping us get the word out.

Bret: Great, great, well thank you so much and please thank Max for us as well for all that he's doing to help with this movement and I can't wait to see more out of the MaxLove project.

Audra: Thank you so much, thank you for your time.