

VIDEO - Diet Doctor Podcast with Dr Nasha Winters (Episode 34)

Dr. Bret Scher: Welcome back to the Diet Doctor podcast with Dr. Bret Scher. Today I'm joined by Dr. Nasha Winters. Now, Dr. Winters is a naturopathic physician and the author of *The Metabolic Approach to Cancer*, and if you haven't heard her story, you absolutely are in for a treat because she has a remarkable story, which you are going to hear her talk about a little bit where starting with a diagnosis at age 19 of basically end stage ovarian cancer.

And here she is 20 plus years later where she has transformed her life of not just being a cancer survivor, but now helping people navigate their own way through cancer diagnoses and using lifestyle including a low-carb ketogenic diet as well as a lot of introspection and learning about yourself and taking care of yourself and how that can help with cancer diagnosis and treatment.

In addition to using things like fasting and mistletoe and so-called alternative therapies, but here's one of the keys that I like about Nasha, Dr. Nasha, is that she understands the importance of bridging the gap between so-called alternative therapies and conventional therapies that we can sharpen our tools, so to speak.

That chemo-therapy, radiation therapy they have their place and we can use them better in conjunction with these alternative therapies, so I think that's a great perspective that she brings forward. But also the perspective of seeing people as a human being and improving this whole experience and if it improves longevity, great. But most importantly, improving quality of life and improving how people live.

I think you're really going to get a great perspective from her about that and I hope you enjoy this interview with Dr. Nasha Winters. Dr. Nasha Winters, thank you so much for joining me on the Diet Doctor podcast.

Dr. Nasha Winters: Great to be here with you again.

Bret: Now you have such a remarkable story that I know you've told many times, but it's worth telling again just because the power of the story and what it means for you and how you've helped transform the lives of so many people. So, if I can set the stage to get started right away,

I mean you were age 19, which is a time when most people don't think about their health at all. You're thinking about your life and everything that's going on and your future, and then you're given this diagnosis of stage four ovarian cancer at age 19 and basically given three months to live or something like that. I mean, you can't overstate how that transforms someone's life and how that impacts someone's life. So, tell us, if you can summarize what was going through your mind at that time and sort of what's put you on your path that you are on now.

Nasha: I do tell this story a lot and it helps to kind of distil it down for me and remember the components of it, because like you said at that age most of us are in our lives we are not thinking about - I mean, we think we're immortal. We're so not concerned, living in the moment and other things and actually inhale life in such a profound way, but I was actually a little bit different than a lot of of my peers at that time.

I had come from some pretty challenging background, In my first year of college-- the first person in my immediate family to go to college and a lot burdens of financial concerns and issues and just having to take student loans out, the whole bit. But I knew what I wanted to do... I knew I was interested in medicine; that was always on my path even from a young age. But I had been basically sick for my entire life and didn't even realize it.

It's like the concept of the lobster running to the cold pot of water and boiled on the stove without realizing until it's too late, oh my God, this is taking my life. And that was me; that was my background; a lot of health issues from a young age; digestive, lots and lots of skin issues, lots and lots of hormonal issues.

And so everything for me, that was my norm. And so by the time it felt abnormally unhealthy, I was even accustomed to writing it off saying, oh, you know this is just part of my digestive pattern, or oh, too much information for your listeners but my doctors told my mom pooping once a month was normal because that was my normal.

Bret: Once a month?

Nasha: Oh yeah! And so digestive changes didn't really dawn on me, and a lot of the symptoms of ovarian cancer are very much starting in the digestive arena. And so for me, it just seemed like more intensity of the same that I'd experienced my entire life. So, by the time I was ending up in and out of the ER, for almost a year, eight or nine months, they just kept sort of saying it's IBS, or it's polycystic ovarian syndrome, or it's endometriosis, or it's ectopic pregnancy. I'd be like that would be very difficult to do.

And there were all these things they were throwing at me and then they started treating me like a histrionic crazy patient and that it was all in my head, so they

started down the road of more and more drugs to treat that, which I had terrible adverse reactions to, every pharmaceutical infection and pain and I was just a living pharmacy at that point.

And by the time I had a visiting doctor who came on staff who decided to take a deeper look into what was going on, probably because he had 19-year-old daughter and had a little compassion in a way that the other doctors who had seen me week after week, month after month had lost, which I think is super important for all doctors to remember.

Bret: Super important.

Nasha: Yeah. Big one. Because we all get our judgments in the medical profession for sure. And this man saw me with fresh eyes and did the testing and shocked himself, as well as him telling me, which I felt I needed to comfort him, that basically it was too late and that I was in the last stage of organ failure and had and at the stage I ended up at the hospital, I had terrible oxygen; my oxygen levels were in the 70s.

I was in kidney failure, liver failure, attack of cardia, they weren't sure if they could stabilize my electrolytes, I was terribly, terribly malnourished and had severe ascites, which everyone just told me, you need to eat less in this arena, because they thought I was gaining weight even though my legs were sticks and my arms were sticks because I was terrible sarcopenic, muscle loss, the whole bit.

So, by the time they figured out that I was actually carrying like an eight liter water baby in my abdomen, that's when they realized I had nuts in my liver, peritoneal implants, I had lymph nodes everywhere along with this giant mass in my right ovary. And between that, the lab tests, pulling out the fluids, sending it for biopsy a little local, a lot of other testing, they realized this woman is in stage of ovarian cancer.

And I was so sick and basically with my organ failure they basically said, "One treatment will kill you in an instant, so if we treat you now, you'll die this week, if we wait, you'll be dead in three months." So, those were my choices. And sometimes when we're given no way, we find ways.

Bret: Yeah, so with that type of presentation and the way it was presented to you, I mean, how many people would just roll over and give up and say, 'that's it'?

Nasha: Yeah! Well, and I will tell you. I've said this in some other interviews I've done. I was at a time in my life when I really didn't want to be here. In fact, I tried to take my life several years before and was just in this place where the moment I was told I was going to die was a wakeup call. And it lit a pilot light in me that was like, they're telling you can't it be done.

My stubborn gene kicked in and I set out to change that. Now, I honestly didn't think I was going to save my life, but I thought that I could at least learn everything I could in the process and learn from the disease process itself. Like what message was it trying to tell me? I had some weird sort of instinct to know about that at such a young age, to know that this held a lot of good information.

Bret: That's amazing because that's such a hard concept to grasp. Like what does cancer teach you, what gift did cancer give you? I mean on the surface it sounds like it's cancer, how can it be a gift? But when you dig deeper - and for you to have the insight as a 19-year-old, it's really impressive, it really shows... I hate to say it but you are the right person to be in this position to overcome it and transform your life from it.

Nasha: The people who knew me as a kid, I was always coined the outlier of everything; sometimes good, sometimes bad, but I think that having a little bit of that I don't really run with the flock. It is a gift, you know and my mom has that same gift. You know, she was in third grade I think, living in Coldwater Kansas, a tiny town, when she read the book *On The Road* by Jack Kerouac and decided she was a Beatnik.

And her library in the town burned the book, you know. So, I think that was infused in my epigenetics of women overcoming. My grandma lost her husband when my mom was seven in a gun accident and all kinds of crazy situations that these women in my lineage had overcome, so I was no different than that.

Bret: Yeah. That's fascinating that it's in your genetics so to speak.

Nasha: Totally, and I love learning about it. We have a had a lot of studies that trauma or past issues in previous generations will change your epigenetic expression. And so we didn't know that in 1991. That concept hadn't started to up yet, but what we did know in 1991 was the emerging field of something called psychoneuroimmunology. And I was a dual major in school at that time for biology and chemistry on track to go to medical school.

And I shifted my degree with a major in psychology and a minor in biology just knowing my own psychology and its impact in my biology. And at that time, the work of people like Candace Pert and Bruce Lipton was coming to the forefront and we were starting to get the science and the data back that our thoughts, our traumas, our experiences change our immune system and change our physiology in a profound way.

Bret: Wow.

Nasha: Yeah.

Bret: Right, so this emerging field saying it's not all about the biology but there is a body and brain connection, which is really interesting and I want to get into more but-- more along your timeline, Not to fast forward your story too much, because I know there was a lot there. You're able to recover from this, you're able to learn more about it, but you're also starting to learn about cancer being a metabolic disease rather than sort of a genetic disease or this two-head theory.

So, I want you to describe that a little bit more because the approach that we take for what cancer is can frame what we can do about it both for treatment and prevention. So, tell us about the difference between it's your genetics or it's a metabolic disease or is it a combination of both?

Nasha: So, I really appreciate that question because there are two cAMPs now. We have the somatic cAMP, you know the folks that are saying it's just a Russian roulette game, it's just bad luck, if you get a disease process like cancer, there's nothing you can do about it, you're a sitting duck. That's a very bleak way to be on this planet in my opinion. It's also, the science is showing that that's not true, despite this particular group out of Harvard still trying to publish papers saying something different this many years later into as recent as 2017.

So, in the other down the hallway of the same institution is a group of people pushing this concept of metabolic cause, so things happening down at our energy processing plant level of our body, which is our mitochondria. A lot of people remember that as our mighty mitochondria from our sixth grade biology class, but that is where the magic happens. That is actually - when we talk about the fountain of youth, there's not an exogenous outside of this pill or potion to change this.

It's an internal process that happens at the cellular energy level at our mitochondria, and really our mitochondria are our fountain of youth. They are our longevity Mecca of how to change this. So, to kind of take that a little bit further, you have one cAMP that says it's genes, it's predetermined and there' nothing you can do about it.

You have this other cAMP saying, hey-- and actually the other cAMP says genes have nothing to do with it; it's just the metabolic powerhouse process, and yet I'm a believer that we have the genes that can load the gun, but it's our choices - our day to day lifestyle choices that impact the health and behavior of those mitochondria that pull the trigger.

Bret: Yeah, I think that's a great way to say it because when you're in one cAMP or the other, dismissing the other cAMP, you can't completely dismiss the fact that there are genetic variations that happen that make cancer much more likely.

But not everybody with those mutations get cancer, so there's clearly something else influencing it. But also the genetic explanation for cancer that says it's not your fault, which is nice for people to hear. Whereas on one hand the metabolic explanation in a way almost says it's your fault, which is kind of a hard discussion to have, isn't it?

Nasha: Yeah and that's really in fact when I had this conversation, I'm very mindful of that because I knew at that young age, at 19, I knew I came from a long line of trauma... to keep it simple. I knew that I had come from something known as the ACE score, which is Adverse Childhood Event score. Because I was a psychology major as well, we started to learn these 10 questions on the ACE score questionnaire, that your listeners can download online and take the questionnaire for themselves.

For these 10 questions, for any, yes, that you have, these are 10 questions regarding your experience in life before the age of 18, and for every yes you have, you increase your risk for chronic illness and cancer in your adulthood by 10%. So, let's say you have four out of the 10 yeses and that means you have a 40% higher likelihood of having cancer or some type of major chronic illness in your adulthood over people who didn't, who had a zero.

So, just to give a reference, I had 10 out of 10. So, of course something that made me say I also came into this world experiencing things that I didn't have a choice around. They weren't my day to day decisions, they were the decisions of other people around me and other situations around me. And I also knew, just like you said, what made you decide to fight and change it versus just being a victim to it. I had also seen the victimhood card in my family of origin a lot and I knew I never would fit that mold.

And so, I was like, "So what can I do?" That's what led me on this 28-year journey of what is in my power, what is in my control? And there are things that I still learn today that I can improve upon. And so, to me it's a learning process. Once you know something, then it frankly is your fault. And that sounds harsh.

But when we know each time you're taking a cigarette puff, that you're taking seven seconds off your life and you change your glutathione status and you absolutely wipe out your antioxidants and you lower your immune function and you increase all of these inflammatory cytokines. You know that the data is there and yet people still do it. Yes, it's an addiction but you can get help with addictions. So, it's that type of thing for me.

I learned processes for myself that gave me the power to know why and then to implement something to change the course. And that's what I try and teach people, that you didn't know. Like I didn't know, you know about body care products that were endocrine disruptors. I didn't know that vitamin D was critical.

I didn't know that being a fast food junk food vegetarian was actually harmful to my health. I thought it was actually something good for my health and the planet. There were so many ahas I learned in this time, like it didn't happen overnight. Like I said I'm still learning and I teach my patients it's a journey, not an event.

Bret: Yeah, that's a great perspective because when I led with the question the metabolic approach makes it seem like it's that person's fault but really, if you don't know any different, it really isn't and it's sort of our job to educate people about what the risks are. But when you come down to defining risks, it's difficult, because the study you talked about with the ACE score, those studies aren't causative, those studies are associative, but certainly if there's an association, it needs to be paid attention to something like this.

And it's hard for the average person to sort of connect the dots too. Like why would a bad childhood event lead your risk of cancer? On the surface that kind of doesn't make sense. But the study showed an association so was it something about the lifestyle you lived or people who are in those situations tend to eat more junk food, and it could be different things, so you can't close your eyes to the association.

But you didn't learn this as a 19-and-a-half-year-old, did you? So how were you able to make it through that initial step to get through to this path that you're on now?

Nasha: First of all, there are studies showing that the ACE score is more valid than association, and we can actually check for HDAC inhibition, epigenetic expression, we can do those tests. We can look at physiological changes, we can look at brain wave changes, so you can see that they have studies that are ongoing for decades at this point and you know, people who have experienced traumas, we can see brain mapping changes.

And it has gotten down and that's why people like Candace Pert, who is no longer with us, she was the physiologist looking at the physiological changes of these traumas and stressors on our chemistry, which of course sets up the playing field for a disease process. And then people like Bruce Lipton looking at your microbiology and looking at what it was doing on that level.

We now have studies on the microbiome changes and wave changes. So really, all fields of medicine have dove deep into these questions and taken it from association more to there are some definite causative changes down at the cellular level, which is pretty wild.

Bret: That is pretty wild.

Nasha: It is.

Bret: Would you admit that still on the outskirts of medical practice--?

Nasha: Oh totally, totally.

Bret: And why the hesitation to adopt it? Is it because it's contrary to the model that exists and people know what they know? Or why the hesitation to make that more mainstream?

Nasha: I think number one is there's part of that in the system of medicine does not allow us to dig deep into somebody's psychology and trauma. And even in my book, *The Metabolic Approach to Cancer*, there's 10 major facets that affect this and yet, our last chapter is on the mental-emotional. Frankly, it should be the first approach, but in human nature, that's the scariest and the hardest peak to summit.

And so, it's not something you dive into unless you really are ready and unless you have a really good team to support that. And it takes a lot more than the seven minute visit that our physicians and PAs and our nurse practitioners are allowed with their patients because of our medical system. There is stigma, there is insurance billing, it's not codable in many cases. So, there's a lot of reasons I believe. And there's not a lot of interest to fund studies because you know, you don't really want to give a drug. We try to for these situations but really they're about mindfulness and changing trauma patterns and changing diet and lifestyle patterns and those just frankly don't bring in the bottom dollar. So, yeah.

Bret: So, if you are someone who has had these traumatic experiences, you can't undo them, so what can you do moving forward to try and decrease your risk of chronic disease?

Nasha: That kind of goes back to how did you figure this out at 19 and how are you still figuring this out at 48. And so, it's an ongoing process of learning and it's an ongoing process of each time we learn something new, we apply it and I wish I had me 27 years ago because this would have been a much faster process of how we can test, assess and address someone in the moment that they're in.

And it is little digestible pieces at a time of knowing, hey, this affected me, this is the genes, this is like the loaded gun we talked about, that's my life experience and I can't change that but I can change how I react to it, how I respond to it and how to move forward from this moment.

And those are things that can happen at the cellular level from your dietary choices, from who you're associate with, from the emotional support you get, whether it's through faith or through counseling or through psychedelic experiences, whatever may change that sort of neuro-network and life experience for you inside to have a

different perception and observation of the world around you, which will align you with making different choices, because your point was beautiful.

Earlier you said well, kind of like the chicken or the egg, the nature nurture concept of are these folks sicker because of the choices they continue to make or because of that trauma. And it's true. We kind of get stuck in a rut and all of those times we think we're learning now, we can help people build new pathways.

Bret: Yeah, it's fascinating.

Nasha: It is.

Bret: Fascinating and sometimes difficult to wrap your head around, but the other side of this metabolic approach to cancer seems a lot easier to understand when you're talking about glucose, insulin and cancer growth. So, tell us about that, what we've learned about that.

Nasha: What I love about it is that's how I love to start with people. That's very tangible; they can see it, they can feel it. And the cool thing is the side effect of that is that it is changing your own pathways, it is changing BDNF in the brain which is brain derive neuro factor, it is changing dopamine response, which is-- there are only two things that make you feel good in the world, which is serotonin and dopamine; so, it changes that balance and expression.

It up-regulates genetics that make you more resilient and robust. It changes your immune system function. So even if they're starting on the more tangible, it is impacting a lot of the intangible simultaneously, and then people start to feel more ready to go there in the future on their own pace.

So, with that, the metabolic changes are huge; what we're finding in all chronic illness today. Although I look at cancer, there could be Autism, cardiovascular disease, diabetes, they're all sprouting from the same broken, metabolic, fuel functioning, fuel choice system. And as you've heard me say before in our previous conversations and throughout the book, up until 1850, we were all "low-carb". Right?

Bret: Right.

Nasha: About 30 % of our calories came from carbohydrates and we worked very hard to get hold of those carbs and ingest those carbs. Today, it's 70 to 80 % on average.

Bret: And we don't have to work very hard to get them.

Nasha: We don't. I mean, I love that movie LA Stories, where they get in the car and they drive two houses down to their neighbors. I mean that's what we do today. So we

have changed that energy system, energy out, energy in, as well as sort of the type of carriers that those energy systems are in, so when we're bathing the body with GMOs and glyphosate and things like that which have never been exposed to the human condition before and that sort of adds injury, speeds up that process that didn't exist 50 years ago, 100 years ago, 200 years ago.

Bret: Yeah. And that's a fascinating field because when we talk about refined carbs and high sugars, do they cause cancer? Does this type of eating pattern and lifestyle cause cancer? There's a thought process behind it and then there's an evidence base and they don't always agree.

I mean, the evidence isn't strong necessarily that it does but we have some evidence that insulin is a growth factor for breast cancer cells, and it makes sense that cancer cells need glucose for fuel, they can't burn fatty acids for fuel as a general statement, so all these things sort of make sense that anything that's going to increase your glucose and your insulin can increase your risk of cancer.

But that's still functioning a little bit outside of our current scientific consensus. So, when you've made your career in your life helping people in this field, I mean, how do you recognize in yourself sort of that difference between what you're recommending and what scientific consensus says is proven?

Nasha: Right, well, you know, first of all back at my diagnosis, I was at a very small four-year liberal art school. I didn't have a fancy library; I didn't have the newest textbooks. That was a present for me because one of the first books I found after my diagnosis was a book by Otto Warburg and a lot of his research of his time, which was about the metabolic and the fuel fuels for cancer cells.

And this is back in 1991, you know. Our dietary recommendations were hardcore into the low fat, you know, high sugar high carbohydrate, don't eat protein, you know. It was just... eggs will kill you, salt is bad, I mean we were really hitting our stride with that ideology. So, me as a vegetarian for several years prior to my diagnosis actually, of course vegetarianism has a spectrum just like ketogenic has a spectrum.

So, I was the iceberg lettuce and pickle, wonder bread, miracle whip. That was my sandwich every day. There is no food in that mix at all. And so you can do all of those things healthfully or non-healthfully on the spectrum. But what we started to learn from the research over all these years, is that there are some studies showing that hey, there could be the possibility that sugar causes this, but even I'm not in the belief system of that.

What I learned, and I'm actually going to be speaking on today a little bit is that food is tied to a lot of emotions, a lot of traditions, a lot of cultural things. And many times

under duress, we don't reach for what we need that is the best for us, we reach for what is going to get us through.

It's a coping mechanism, so there's a lot of emotion attached to it, there's a lot of self-comfort from the food choices we make, and frankly carbohydrates are the bomb in pretty stressful and stressed times. That's what we're trying to reach for, it's not like "Oh, I want a really comforting bowl of broccoli." That's not where we're going in those moments.

Bret: I could kill for an avocado.

Nasha: Actually I do that now, so I'd do kill for an avocado now. But didn't back then, I hated avocados back then. So, there's that side but what we have learned... and a lot-- again, just like I was talking about the different cAMPs, the different specializations in medicine and science that are looking at trauma impact on physiology, we're now starting to understand what high carbohydrate, high sugar, high insulin does in various physiological components of our body.

We know that it lowers IGA and wipes out natural killer cell status for up to seven hours with just a single teaspoon of sugar. We know it basically browns us inside that glycosylated end-product and does all kind of damage to our peripheral nervous system. So, when people start to get that shuffle and don't feel the bottom of their feet, or get tingling in their hands and feet that is sugar destroying your nerve endings, basically frying them like browning butter in a pan.

Well, it's more like browning sugar versus the butter side of things. And we're trying to learn about, maybe it has an impact on the brain more than we thought. Things like brain tumors, when you look at scans, they are super glucose-sensitive, they love their sugar. And we're seeing now Alzheimer's, known as diabetes 3.

And again, like all these little islands are having their own experiences and now because people like you and Diet Doctor, and all these things we're talking to each other, and we're showing them at conferences like Low Carb and other places to realize, wow, that person with Alzheimer's, that matches what I've seen in the cardio world, or the diabetes or the obesity world or the cancer world.

Bret: Funny how it's all related.

Nasha: 100 %. And to me, I come and hear my colleagues speaking of cardiology to learn how to take care of patients with cancer. And you know, that's huge, and, in some ways, I think that makes our job much easier. Much easier than it was five years ago, 10 years ago.

Bret: What we're talking about it is giving people the best chance for a healthy life and that encompasses diabetes and heart disease, and neurologic disease and cancer. It's not that it's going to give you or prevent you from getting it, but it's giving you the best chance to live a healthy life, right?

Nasha: And typically, if we are choosing certain foods, they're changing our thought process, they're changing our physiology, our endocrine hormones, our neurotransmitters, which will often equate to changes in how you feel and what you think and how you perceive. And so that sets you up for a lot of different choices that are difficult to tease out in a single RCT study, you know. It's just a difficult thing to do.

Bret: Right.

Nasha: Yeah, yeah.

Bret: That's for sure a lot of moving targets.

Nasha: Yeah.

Bret: Which brings up the treatment of cancer. So you can look at it in a couple of different ways because there are some people out there on the Internet who say chemotherapy is poison and awful, you shouldn't use it, radiation therapy just kills people and we should all just go on a ketogenic diet but--

Nasha: That's dangerous.

Bret: That's dangerous, right? But instead that's what I've liked so much about your messages that you try and bridge the gap between traditional cancer therapy which in many ways is miraculously curative and in other ways is a little less effective, but trying to find ways with your lifestyle to make it more effective. So tell me about that a little bit more.

Nasha: One of my missions is to fill in that chasm, you know, build that bridge because the more I hear on the only standard of care side, it creates a lot of problems and the more I hear on just the alternative, the integrative side causes a lot of problems, the way we use standard of care can be drastically improved upon because we haven't seen any major changes in 50 years. So it's not to say like we have this tool... let's tweak it, let's see how we can make it better.

And that is precisely where something like a ketogenic diet comes in for some of the other therapies that I promote in-- and what I've learned over the time. So let's use radiation as an example. We now understand and luckily there's even a handful of radio oncologist here, at this conference and that have come to the previous

conferences that put all of their patients on a ketogenic diet prior to starting radiation and ongoing through and for up to six months to a year after.

And the reason being is that the studies, the literature shown us-- the studies have shown us that patients who have elevated insulin and elevated glucose haven't basically de-sensitized their cancer cells to the radiation and increased sort of the scatter and the damage to the healthy tissue around the tumor. So we've been showing this since the 1980s.

Bret: Really?

Nasha: And yet the conversations are not being had with the patients outside of a very small elite handful of radio oncologists that are making waves now, thank God. Because it should be standard of care that you assess the insulin, the insulin growth factor, the hemoglobin A1c of all of your patients before initiating radiation therapy, because frankly you're wasting their time and yours and increasing secondary cancers, increasing progression recurrence of cancers and basically negating any good effect of the radiation at all when insulin is still surging through the system.

Bret: Interesting, and again it's the sort of the disconnect of the evidence that we don't have the outcome trials proving it but we have a mechanism that suggests it should work.

Nasha: Exactly and that's where-- to say that radiation is bad... but when we can basically harness it in a different way you can focus it like a-- think about using the ketogenic diet like the Trojan horse that carries the radiation to its intended target and has a much higher-- we have studies showing-- it has a much higher kill-rate of the tumor cells and a much less recurrent rate and definitely a much less recurrence of brand-new cancer because radiation is a known carcinogen, right?

Bret: Yeah, so we are using a carcinogen to treat cancer.

Nasha: Exactly and that's the place where you can make the standard of care therapies work much better, we're seeing similar evidence in the realm of say fasting with chemotherapy. And thank God for people like Valter Longo, because we've been saying this since the 1920s that this is the way to go. Yet also in the latter part of the 1920s, doctors started freaking out about starving already starving patients, because they didn't understand cachexia. They didn't then, they don't now.

Bret: Please, define cachexia for us, because this is important.

Nasha: So cachexia is a concept of meta-- it's actually defined as metabolic muscle wasting. It has nothing to do with calories, has nothing to do with caloric intake and

it's fueled by two things: inflammation and sugar. Actually a third secondarily, but I think it's more of a response which is angiogenesis, which is new blood vascular growth. But ultimately when we eat a high carbohydrate diet or even still "a normal carbohydrate diet" in that moment it can stimulate more rapid metabolic weight loss through muscle wasting.

And so what happens is it basically stores up the fat and breaks down the muscle for your preferred fuel source. And the irony is if you feed it more ho-hos and dingdongs and high sugar smoothies and milkshakes which the American Cancer Society suggests that you do. In fact their number one recommendation is things like cookies, ice cream, angel food cake. They have a list of top 10 foods to eat and they're all highly processed, high sugar, high carbohydrate laden foods.

Bret: So on the surface it seems crazy, but the rationale is you need your strength, you need fuel and your calories to get you through this, because let's face it, it's a difficult time and frequently people are nauseous, people don't want to eat, so just get any food in that you possibly can. But where does that break down?

Nasha: I love it, so that's where people like Dr. Longo have come along and said that probably our biggest benefit of chemotherapy is the fact that it makes people so bloody ill that they can't eat.

Bret: Interesting perspective.

Nasha: I know. And so I've seen that time and again and what he was able to show was patients who fast for two days before the day of and two days after, so for a five-day total around their chemotherapy they don't need the pro-drugs, they recover much quicker. Yes, they lose some weight in the process of those five days, but they bounce right back and stabilize better than the patients who just 'keep on, keeping on' and they also have better response to the tumor burden.

The tumor burden is reduced even faster in that population and the patients feel better. And I've had the pleasure of working with thousands of patients who've done it kind of what I call the Valter Longo way and the "normal", which is highly abnormal way and I'm here to tell you that the patients know the difference immediately. The idea of fasting with their chemo terrifies them mainly because of the terrible misinformation and mythology that their nutritionists, the oncology office and their oncologist is telling them, so they are terrified, their families are terrified.

But when they trust and lean into the process and start to understand, this is a metabolic non-caloric process that will be stabilized with a proper amount of protein and fat and a reduction in carbohydrates or even no food at all. It's a totally shift for

them and when they live it and feel and experience it, that's when they won't go back and then they say, "Can I keep doing 3 to 5 day fast every month?"

And people like Dr. Valter Longo say six months post-chemo or radiation, people should be doing a 3 to 5 day fast every month just to clean up from the damage of the standard of care treatment. And can lower rate of recurrence and progression at that point and he as well as others say for folks who've never had cancer, that maybe a 5 to 7 day fast once to twice a year will be your sort of gateway to longevity. Ongoing.

Bret: Yeah, it's interesting how fasting plays into it. And if you get into the mindset of a patient who is newly diagnosed with cancer which-- Yeah, you're overwhelmed, you're scared, you don't know what to do, you don't know who to trust and you have to put your faith in the medical system and the doctor you're seeing.

And if your doctor says fasting is crazy and on the other hand you read something that it's wonderful, it's just more confusion and make you more overwhelmed. So what kind of advice can you give to people about how to sort of sift their way through the madness?

Nasha: First of all I always remind them to ask their doctor, "How much nutrition did you have in school?" And I went and spoke to a huge group of neurologists recently at the big annual international conference on brain tumors and ketogenic diet and I asked all of them how many of you used the ketogenic diet with your patients? Not a single one raised their hand. How many of you have patients asking about it?

Probably about by 50% raised their hand. How many of you have ever tried or utilized a ketogenic diet? One person raised their hand. And I said, how many of you had educational nutrition in medical school? Not a single person... And there were 175 people. 25% or even less medical schools even offer an elective course on nutrition.

So just like you shouldn't asked me for mechanical advice on how to fix your car please do not ask a physician about their nutritional advice. Or an RD, unless the RD nutritionist has gone on to do more education because they are trained by an industry, they are trained basically by Big Pharma and so they are not in a therapeutic state. So that's number one, that's what I tell patients right away. I'm a little bit out there with that but I can't after this many years-- I feel a little bit confident to do that.

Number two - I remind patients that the biggest challenge of cancer is the diagnosis. That is the medical emergency because the way you respond and react to it may be what plays the biggest role in your outcome. And so there are a few, just tiny percentages, probably 0.1% that actually have a medical emergency that need to actually do something immediately - surgery radiation etc. Most of us can take a moment.

It took 7 to 10 years for that cancer to be big enough for you to even know it was there. It doesn't happen overnight. So you can take an extra 7 to 10 days or 7 to 10 weeks to decide your next course. And when you do that you start to find that there's a lot more information out there available to you that your doctors just simply don't have the time, the energy, or the desire to learn about. Their schedules are crazy, I have extreme compassion for the medical community. It's a system now that's very broken.

Not the doctors' hearts or belief systems but the system really doesn't allow it. So that's number two - I bring compassion for the practitioners. I encourage the patients, I give them a few handfuls of literature, especially a lot of Dr. Longo's work so they start to educate themselves about that.

I have them really read up on cachexia to understand that, I educate the family on this to say you can give your loved ones-- everyone wants to do a food train... you can give them recipes, you can give them ideas on here's my food list, these are the things I can eat, because everyone wants to help. And we do that through the love of food and so you can give them guidance. You don't have to eat aunt Betty's, you know, angel food cake. You can have her ketofied and give her Maria Emmerich's cookbook.

Bret: That's a great idea, because so many people want to rush out and help. And how are they going to help? They will bring the lasagna over, they're going to bring the cookies over and—

Nasha: We can upgrade them. So you can do it and cool thing is when you do that, you start to hit the masses because they start to think about, why can't they eat the angel food cake? And it starts to trickle into their homes. In fact a really crazy story-- I just flew back from Greece from a 10 day retreat for myself and I love the blue zone Mediterranean diet of longevity and what not which is a whole another topic, but when I was coming through security my name kept being called over and over and I thought, "Am I getting my flight canceled? What's going on?"

They probably called me 10 times and I'm working my way towards a bit, it's taking forever... I get up to the front of line... sure they're going to tell me I don't have a flight... and what they tell me... "Are you the author?" And I'm like, what's going on? I am in Athens for crying out loud. The pilot he and his wife, both had cancer, had got your book, read your book, applied your book and said you have changed his life.

Which makes me want to cry right now because it was just a shift in their understanding and their consciousness because all the advice they had been given, they knew it didn't quite resonate, but that's all they were given was this one

perspective. So somehow they stumbled upon my book, read it and changed everything. Both of them are doing awesome-- he upgraded me to first class.

I have never even been in business class on an airplane. So an international flight... my biggest challenge was having them help me deal with all the technology in my little booth because I didn't know what to do with anything. But the point is that once we know we can make different choices and that's what my life, 28-year journey, has been of learning how can we sort of bio hack and make standard of care better and how can we have better outcomes and better quality of life and then have people not so afraid of the chemo or the radiation because they realize I can make the outcomes much better with this.

I can have a much more comfortable experience. And when you talk to my patients who'd done standard of care before meeting me you had a recurrence which 70% will... American Cancer Society statistics. And then say, "I did it their way the first time and now I'll do it differently."

Some people pendulum all the way to the other side which can be just as dangerous. So I love when people find me and they are in between pendulum of saying, "How can I enhance this?" And then they say, "I can't even believe how different I felt through chemo, radiation, "how much more energy people told me all the time that I look better... They can't believe I have cancer." We can do this so much better.

Bret: I think that's a great perspective about sharpening the tools, using the tools for a more focused way. But we have to be honest, not everybody is going to have the response you had, not everybody's going to have this positive outcome and that's when I think it falls back on what you just said... how people feel through the process, because that's important too.

You know, a cure is the goal and increasing lifespan is certainly a goal with cancer, but so was increasing just the quality of life as you're going through this process, knowing that not everybody is going have the outcomes. So how do you educate people about that and to deal with that as a person who's been through this and helping your patients get through it?

Nasha: First of all, none of us are getting out of here alive, so one of the gifts of cancer is you might have your days numbered. And so in that it changes, it distills things and creates such a clarity and laser sharp focus of, I finally have this much time, what am I going to do with it? For many people... for other people, it paralyzes them and they really fall through the cracks and become the statistic of hey, you're dead in three months and to the data, dead in three months.

But there's a large number that actually kind of wake up and say, how am I going to live differently? That alone can make such a change. In fact purpose, they are doing a lot of studies on purpose, people with a purpose have much longer-- you know, have better prognosis in longer survival rates versus people like, I am sitting duck, I'm dead.

The other side is that none of us know what our real time is on this planet. None of us actually have an expiration date around us so I always reminded patients of that and I'm like, how can enhance that? How can we do the best with us? And the other side of it is that in every patient I have ever asked who were given very grim diagnosis and had a very poor prognosis, even when I did my assessment... I am like, we are-- it's coming...

Every single person will tell me and many studies have been done on just quality-of-life questionnaires, people will always choose quality over quantity... always. So people say, "If I get two more months because of this targeted therapy drug that will destroy my quality of life... I choose quality." I hear that nine times, maybe 9.9 times out of 10.

Bret: Do you think not enough people are having that discussion though?

Nasha: That's just it and I also give... I have a question like... Basically these are the questions to take your doctor. Because your doctors, I don't know how they do it, but I don't know how they give the news of something that it can be so tragic. And yet you can deliver it in a way... the delivery is everything.

So when I was given my message of, "Hey, you're dead", it was through a man bawling his eyes out with a 19-- knowing that... he related, because he had a daughter of my age. And then when I went to the oncologist after the official diagnosis they basically said, "You're in trouble. You're F-ed."

Bret: Family-friendly.

Nasha: Right, that was the essence of the message and there was no hope and there was almost like-- I understand now... because this doctor and I had become friends again all these years later and this doctor's experience said that knowing me over all these years has changed their experience. And so the way it shifted because they had made up their mind and their thought process affected mine. But it woke me up, it would kill others.

And so with that information again comes choice. And that's where you tell people to take a breath. On my website I have a free little handout for people that's like five steps to do what to do when you're first diagnosed or you have a re-diagnosis and it

really walks people through first breathe. Secondly, turn out Dr. Google and go inward, don't start to talk to everybody, because everybody's well-meaning advice cannot to be more detrimental than good.

I think I was lucky not to have Dr. Google in '91 and not to have all the-- all the information is out there today. It had actually helped me stay focused on what I needed, but today everyone's got a... my cousin did this and it cured him and this person did this and it cured them... there is no one way.

We're all biochemically, epigenetically, emotionally individual and we all need different things at different times. For some people it may be a full on standard of care with no regards to any additional support, for others it may be nothing at all, you know, for others it might be fully alternative, but in what I've experienced, the center point of bringing the best of both worlds into play has seemingly had the best outcomes.

Where the funding for studies will come from, I don't know, but we are working on it. Our next step here is actually a build-out of a huge project of a private owned hospital that's 100% under our research arm.

Bret: Wow, that's ambitious!

Nasha: Small little things on my side, that's what I do. Apparently I was given 28 bonus years so I'll use them wisely to keep on going because we have to do the studies to say, we now know this person's epigenetics, we know their tissue typing, we know the disease like the typical standard prognosis and statistics of their disease type, we know therapies that have shown to work, therapies that have shown not to work, we're starting to get clues of the pathophysiology of how we can address it.

So let's weave it all together and start to collect all these important data points in a huge artificial intelligence network system that starts to say, hey, you had radiation with ketogenic and hyperbaric, you get this outcome. You add mistletoe to this immune therapy to lower all the side effects of the percent of the time these new therapies will create, you get a whole another outcome.

You start to bring in mindfulness, or meditation, or fasting into these things, you start to get even different outcomes. And so that's what I'm excited about, that the future of medicine in the next 50 years is very hopeful.

Bret: That sounds incredible, I'm getting chills just hearing you say that. And I wish you success, because everybody needs it, I mean how many people are going to benefit from that... Which really talks about your transition as a practitioner which I want to bring up, because you have helped thousands of patients, have worked with

thousands of people individually, and now it seems like you've transitioned to helping the other practitioners.

You know the old saying, you can help one patient one-on-one, but you help one practitioner and you've already helped thousands of patients. So tell me about that shift, both how it happened internally and kind of what's your experience in.

Nasha: I did have the experience of one-on-one for many years in a private practice and then the demand became so large that I started to host retreats and I'd have 20 or 30 people that I could say the message to at once versus one. And then the book came out and that was sort of the encapsulation of my message over 25 years that I collected at that point, that was helpful that kind of gave people the groundwork.

And then I pulled out of practice so I could focus on the book and focus on just learning for myself because there's so much happening in the field of oncology today that I needed to keep my own toolset sharpened and prepared and to keep learning. I also traveled to clinics and hospitals over the world.

They are doing things-way-- I mean frankly the US is at least 35 years behind Germany, we are far behind Asia, Southeast Asia what they're doing with radiation. There are so many things that we are way behind, because we have a system that will-- it takes an average as the study that came out in October 2018.

So a study that came out in October 2018 shows that the typical time it takes from information we're interested in studying, whatever that may be, even biotech devices, medical technologies, from the moment it leaves the bench to reach the bedside, to reach basically the citizens out there, people are waiting and literally dying while they're waiting, is an average of 17 years.

Bret: Wow, 17 years... that's staggering!

Nasha: It is and frankly I have so many patients saying, "I'm not interested in waiting. Do it." So thanks to some bills that came through in the last couple of years like the right-to-try act, so for people who are stage IV who have exhausted all their standard of care options are now basically being said, go ahead and try the hyperbaric oxygen.

So basically while these patients are waiting for the data a lot of them now that's part of what this hospital is going to be, we're going to be working the bench to bedside, but we're also going to be working the bedside to the bench. Because we've already been doing that empirically for thousands of years and now we're starting to study why sort of Ayurveda curbs worked or Chinese medical applications worked or fasting techniques worked.

We are now doing studies of things we've actually been utilizing successfully for in some cases thousands of years. And so we can do better, we can also change our research in a way that says, let's do good medicine, let's do scientifically, not proven, but scientifically informed medical care. So we're basing things on other things we've learned that we can say, hey, that makes sense, let's see what they do together.

So that's where we're moving with this piece. And I want to make sure I am getting back to specifically where we were going with this question before the little siren interruption, but ultimately people need help now and there's ways we can do it better and there's ways that patients can do much of this on their own at home.

And so that's the cases that we're now coming up with some good standard testing, tissue testing, molecular profiling, things like blood liquid, blood biopsies, is starting to change the face of medicine as we know it, especially the oncology world, that we don't have to give everybody the standard of care. We can actually move more to precise care saying, you might have breast cancer, but your sort of fingerprint of your breast cancer looks different than this person's, so we can treat it differently and have a better outcome.

Bret: Your approach is remarkable and it's one thing to help individual patients and it's another thing to then want to expand your scope so much and then another thing to go further and also help with the research. I mean, you're really hitting it on all three levels and that makes you remarkable for what you're doing, so I want to thank you for all your work and the impact you're having on people, but also bringing it back to sort of the rational side of things.

Let's not get carried away, let's not over speak what we know, but let's use things in a reasonable, a safe and a rational way and I think that's such an important message.

Nasha: It's huge and again that's kind of, I'm remembering now, where we were going with this of the one-on-one was great... the retreats impacted this, but what was happening after these retreats is now I had 20 or 30 people going back out into the field, saying, "I learned all this information and it helped me apply it to their practitioners and the practitioners were like, "I have no idea what you're talking about. What is this?"

So the bottleneck began to be through the practitioners. Some will say, "That's BS, that doesn't exist, or I just close my eyes to it, can't deal, I don't have time for that, I don't know what to do with this information", that's where we are right now, in this crossroads of now there are physicians because your patients are demanding it saying I need to learn this stuff.

So that's what I'm doing, my approach-- these are falling off my head... my approach now is with teaching doctors how to test, assess and address each patient as an individual and how to enhance their standard of care outcomes and help them deal with any side effects and help with the disease prevention-- disease prevention, you know, of recurrence and so that's where I have been focusing my care now but even that is filling up. So now I'm starting a process of training larger groups of physicians at once, kind of in a forum online.

That's going to be ready to start early 2020 and then eventually we'll have a hospital where physicians can come from all over the world in a research environment, teaching hospital environment, to learn this in real time speaking with the experts in all arenas of medicine. Because this hospital will have radiation done better, chemotherapy done better, targeted therapies done better because we're going to be testing and assessing every single patient before they start any of their treatments to know what is the possible best course to start and how do we change it as we go along and then follow them for years to come.

Bret: I hope I'll never need it, but if I do need treatment, that's where I want it for sure. If a patient or a physician or even like a hospital administrator wants to learn more about this, where can you direct them to get more from you?

Nasha: Right now you can find me on drnasha.com, D-R-N-A-S-H-A.com That has tons of information, we have tons of podcasts, in fact your original podcast is on there, lots of information, research, things that I like to collect, kind of my favorite things. There's also that little five free handout on Pfeiffer steps to a diagnosis that's there for you to take as well.

Then you can follow me on all the typical social media; Instagram, Facebook LinkedIn, Twitter, all those crazy things under drnasha or the metabolic approach to cancer, you can find that in my book, and then for the hospital check out the Believe Big Institute of Health. If you just go to the believebig.org website, there's a link there for the Believe Big Institute of Health, which is in its process of coming together.

That's our working title right now because that's the entity in which we are starting the funding of the process, but these are the same people that started Johns Hopkins trial on mistletoe.

They found philanthropic monies and donations to help fund a trial that was otherwise never going to receive funding from NIH or other outside resources and it's into its thirty-year and incredibly successful the use of mistletoe in cancer, patients stage IV, end-of-life, that were otherwise not given any other options and they are now seeing some pretty extraordinary things. I can't wait for the data to be published.

Bret: Well, thank you for your passion and for all your work and thank you for taking the time to join me on the Diet Doctor podcast.

Nasha: It was so amazing and thank you. I love you made this transition and DietDoctor is an incredible resource.

Bret: I agree, thanks. I had a great day.

Nasha: Thank you.