Introduction to Dr. William Li

Well, Dr. Li, it's such an honor to have you on this segment of Cancer Breakthroughs. Thank you. Thank you so much for joining me. Well, it's my pleasure.

Thanks for having me on. For everyone out there, Dr. William Li is chief executive officer, president and medical director of the Angiogenesis Foundation, a nonprofit organization he co-founded in 1994 to reconceptualize health and fighting disease through angiogenesis, the process used by the body to grow and maintain blood vessels.

Over two decades, Li's leadership in the field of angiogenesis and its clinical translation has brought to the world 30 paradigm shifting treatments for cancer, vision loss and wound healing his vision expertize and global Multi-Discipline networks are focused on conquering disease and improving quality of life and the human condition through diet, lifestyle and judicious use of medicine that optimize health throughout aging.

Dr. Li's work engaged the White House, the Clinton Global Initiative, National Institute of Health, Fortune 500 companies and leading universities and medical institutions across North and South America, Europe, Australia and Asia.

Dr. Li's work has impacted more than 50 million people worldwide, and he's the TED Conference speaker and 2010 U2 leader. Lead singer Bono identified Dr.

Li in the New York Times as one of the top ten, with the potential for change in the world in the next ten years. He is also the author of Eat to Beat Disease and Amazon bestseller and then also his newest book, Eat to Beat Your Diet, Burn Fat, Heal Your Metabolism and Live Longer.

Well, Dr. Li, I am I'm so honored to be chatting with you today in regards to what we can do to eat in order to be able to battle cancer.

How Cancer and Food Interact

That's a great question and a really, really big one, because I as a cancer researcher and also as a physician who takes care of cancer patients, I can tell you that the simple approach that we've all become used to from past training, which is everyone is fine until they have a symptom, and then you do a diagnosis or screening or diagnose, then diagnosis to catch a cancer.

Then you open up the playbook and deliver chemotherapy or radiation or surgery. And then you can, you know, you sort of rinse and repeat until it doesn't work anymore and then it's game over.

That's really how physicians have come to think of cancer care starting, you know, really going back into the mid 1900's up until, I would say 1990 or late nineties.

And so now we've got about 20 years of a paradigm shift. And this paradigm shift is massive and I've been working in the middle of it. So I thought maybe I would first set out what I just did, which is how we used to think about it.

And I think a lot of a lot of people watching this might also think that this is still how it runs, but in fact, it's not anything like that as well at all.

I want to lay this out by saying, number one, our understanding of what cancer is as under gone a deep dive. So cancer is not just mutant cells that are growing.

We know that cancer is what used to be healthy, growing in a microenvironment, an ecosystem that's not so healthy. So you have something that's disease growing in a disease and environment.

And this is where food comes in because the food that we eat affects the environment. Or at that small microscopic level, the micro environment in which little cancers grow. So that's one thing.

The second point is that, you know, we used to think that, you know, you don't have cancer until you have cancer. And, you know, with one in three women, one in two men, you know, we're all waiting the dodged a bullet and see if we you know, you know what it felt like when I went to medical school?

Like life. What cancer in your life was Russian roulette. You know, you had either two rounds or three rounds in the chamber and you just kept on pulling the trigger every year to see if you're going to get it or not.

And and, you know, honestly, back then, you know, 20, 30 years ago, clinical practice felt like that. But now we know something very, very different, which is that we've had 40 trillion human cells in our body and they're dividing all the time to reproduce themselves.

Copy, paste, copy, paste, copy, paste. And we do know that when you do copy pasting mistakes get made. And those mistakes that the genetic level are the setup for developing a tiny microscopic cancer.

So here's the thing. Think about 40 trillion cells, copy paste themselves, and imagine if I were to ask someone to take three sentences and copy them by manually on a word processor, you know, in a word document or a Google doc ten times to probably get it right there, probably get 100% of it right.

If they're careful, if I imagine if I asked them to copy it 100 times, they're going to think there's going to be a mistake. Now, imagine you ask somebody to copy that 40 trillion times.

It's going to be mistakes all over the place. And what we now know is that as the human, healthy human body copies and pastes itself to replicate ourselves every single day, there are 10,000 mistakes that are made in our body and copy can again spellcheck it and find it and fix it.

But each of those little mistakes winds up being the origin of a tiny microscopic cancer. So unlike the past, where we used to think, you know, cancer is a Russian roulette, we now know that, in fact, healthy people are forming little microscopic cancers in our body all the time.

All right. In fact, here's a statistic. Autopsy studies done in England show that 40% of women between the ages of 40 and 50, 40% already have microscopic breast cancers.

And 50% of men between the ages of 50 and 60. All right. You and I might be in that category or within a window near 50% want it to actually have microscopic prostate cancers.

Inflammation, Gut Health, and Fiber

And yet for most cases, they're never going to grow up to become that harmful, dangerous diagnosed cancer that we all fear and that's because our body has health defense systems that search out, destroy those cancers, starve the cancers, prevent them from, fix up, fix the mutations, lower the inflammation in order to better manage them.

And then our immune system pretty much is like a dry erase eraser. You know, the dry erase board that we make our notes on the shopping grocery list. Well, our immune system is so amazing.

It's an army of super soldiers that can work like a dry eraser, a dry board, a razor, and just wipe out those tiny little microscopic cancers. That's actually how normal, healthy humans exist.

So we're existing with cancer all the time. Most of the time they don't actually become dangerous. But when they become dangerous is because they've escaped our health defenses, ordered and been driven provoked by

inflammation coming from excess body fat or an errant metabolism.

Now, this is where food comes in again, because the foods that we eat can ramp up our health defenses and help our body do what it already does, which is combat cancer.

That's prevention. During treatment, you can ramp them up to assist oncology treatments to work better. And we can we should talk about that because there's some game changing discoveries just in the last couple of years.

And third, after you have been healed of your cancer. And yes, I will use the word cure because we're seeing this now. I'm telling you, as a cancer researcher, somebody treated cancer patients.

I've seen cures happen in ways that I would have never predicted I would see in my career. They don't happen for everyone, but we're beginning to see that it's possible to achieve and diet plays a role in there as well.

And when you actually achieve that, you don't want it to come back. So how do you actually do secondary prevention? And this is where food comes in yet again.

So because usually when you when a person is diagnosed with cancer and then they meet with our ecologist and the ecologist says, well, our diet doesn't have any any anything to do with your cancer.

All I want to do is eat high calorie food and just make sure that you don't lose weight. So what you're saying that it's it's far from that that research is actually pointing towards that that food can either, you know, prevent cancer, but also play a huge role while you're undergoing care from an oncologist.

Yeah, well, that's right. I mean, I can tell you every patient I've ever seen with cancer, after they ask, you know, how bad is it, where is it spread, what are the treatments?

You know, before they leave the visit, they always ask, Hey, doc, what can I be doing for myself? What should I eat? Sometimes they leave that they leave the clinic because they're still in shock, but then they'll pop their head back in and say, Hey, I forgot to ask you one thing.

What should I be eating? All right. And oncologists are not to be blamed any more so than any other doctor of past generations should be blamed because doctors don't know the answer.

Because they because the medical community has historically excluded nutrition, especially molecular nutrition, which is where we're at now with with food as medicine excluded from their education.

So, you know, you must be talking to environment or you must be talking to a, you know, a flight attendant about that same question. And in fact, the flight attendant or the fireman might actually have a better answer because they might actually have studied it and tried to figure out what the answers are.

So, you know, I want to just say to everybody, please don't blame your doctor for their lack of knowledge. This is at least until recently it's not been it's been the fault of their education. My education.

I had less than one week of nutrition education in my entire medical school and entire medical training. Everything that I know has been hard won by my own efforts.

So that's changing now. But okay, so what is the right answer that A that a patient should hear? Let's start some people worried about who who should be delivering that information.

Let's talk about like what what should the medical community at large tell patients so that they have confidence that food actually is part of their medicine, their medical treatment?

All right. First of all, if you have cancer, you should realize that you have an overarching goal in your life to lower inflammation at all costs. You want to lower inflammation in your body because inflammation is like gasoline that

gets put onto the campfire of cancer.

The more inflammation you have, the more that cancer is going to be rip roaring, ready to grow faster no matter what you're being treated with. So, number one, I try to tell people, people with cancer, I don't call them cancer patients.

I call them people with cancer, like people with diabetes. Let's not stigmatize people because we all have cancer in our body. You and I, right now and everybody watching this, we have microscopic cancers.

All right. So what I say is lower inflammation. All right. One way to lower inflation is to decrease your intake of ultra processed foods with artificial preservatives and sweeteners and flavoring and coloring.

All those things we do now trigger inflammation. How do they do it, by the way? Well well, probably lots of different ways. Chemically, they can do it.

But one way that is actually profound is that ultra processed foods have been shown to damage your gut microbiome. Our gut bacteria, healthy gut bacteria, 39 trillion healthy gut bacteria, mostly living in our colon.

All right. Now, a lot of people don't aren't familiar with that, with you know, they hear of her gut health, but they don't know where this bacteria list.

So think about our gut starting from our mouth. Run down our throat down to our stomach and our intestines all the way to, you know, the poop chute at the very end.

Right. The tail, the tailpipe. All right. That's about 40 feet, 30 to 40 feet long. It's about the length of a Greyhound bus. All right. All packed together, wrapped carefully, you know, like you ever see, like, a sailing boat how nicely they wrap the the rope?

All that is nicely pack like the best suitcase you've ever packed inside your our bellies. All right. And so and in the last tail end, the last quarter of the of that long tube, that's where the colon is.

And within the colon, there's some there's a little pouch called the cecum. The cecum is sort of like the I don't know, the, the, the, it's, it's fast.

It's like a sock like area, soft stretchy area of the gut. Most of the bacteria live there. We also know, by the way, the appendix actually is probably home to bacteria as well. So are the tonsils.

So gut bacteria living there have a great function.

Immunotherapy and the Microbiome

They control our hormones and control our brain. They help control our healing rate and they release products from the food that the gut bacteria eat to lower inflammation.

So if we feed our gut bacteria, fiber, for example, that they digest, they release a massive amount of anti inflammatory substances that can help lower our overall body inflammation.

Great if you've got cancer. In fact, a study done just within the last last year and a half or so showed that for every 5 to 6 grams of dietary fiber, a cancer patient eats 5 to 6 grams of dietary fiber.

I give you an example of what a food has. Five or six grams of dietary fiber, average sized pair has about six grams of dietary fiber, not very much. If you're taking immunotherapy, which is the latest cancer type of cancer therapy, you need your immune system work for every five or six grams of dietary fiber.

It's been shown that you eat per day. It lowers mortality by 30%. Three zero. All right. This is not a joke. This is

real published by oncologists working at the MD Anderson Cancer Center in the Journey Journal cites the highest peer reviewed journal.

It is a breakthrough discovery, and now we understand it lowers inflammation and helps your immune system work better. And if you are in immunotherapy, you want your immune system to be rocketed.

And if, by the way, if you don't have fiber and you don't have other organisms, there's at least seven different organisms presented just in May of 2023.

So not too long ago at the major conference of the American Society of Clinical Oncology, there were seven organisms that were presented by researchers that you need to have your gut to have, if you hope to be a responder.

Everybody wants to be a responder. Guess what? Those bacteria come from probiotic foods that can be nurtured by prebiotics, which, you know, you can take pills and supplements and symbiotic, but you can also eat all plant based foods.

All right. So that's just it, just as an entry point in to show you how important it is our diet as to be if you've been diagnosed with cancer. So it's so it's almost like yeah.

And like you mentioned, it isn't the doctor's fault. You know, it isn't the oncologists fault. And we need to recognize that they have their area of, of specialty, you know, of expertize.

And so we can't then because they didn't give us any kind of information in an area that they're not an expert in, doesn't mean that that information is not valuable.

And like you're mentioning, you know, these doctors frequently because they don't know, they say, well, there are no studies on that, there's no evidence on that.

But in reality, like you're saying, they are just not aware of all the research that is out there to prove that by incorporating this kind of dietary habits to support the immune system, to reduce inflammation, actually magnifies the impact of of the treatment that that a cancer patient is receiving.

So they then, like you mentioned, they become a responder. That's right. I mean, if you think about it, every patient that a doctor sees, right. I mean, if we're we're seeing patients as doctors, we the thing that we wish on our patients, every single one is that they're responding to the treatments that, you know, that we actually provide for them, whatever that treatment might be or for cancer.

You know that that wish is a less and less life or death kind of issue. So for me, every cancer patient needs to look at diet as a front and center piece, every bit as important as whatever treatment, whatever medication they're receiving or their treatment.

Number one, I know gut microbiome, gut health, dietary fiber. Prebiotics that feed the gut microbiome are critical. By the way, I'll give you another little nugget here that I think many people would not have heard about.

Even the doctors that may be listening, it turns out, for immunotherapy. So let's first of all to say what immunotherapy is. Immunotherapy is not chemotherapy, okay?

It's not radiation. Immunotherapy. This new class of medications that it had been breakthrough, it won the Nobel Prize just in 2018. So this is big stuff.

Is the treatments even to pay cancer patients help activate the patient's own immune system? Remember the dry erase board, that eraser I talked about?

It makes it gives you better erasers to wipe out cancer. Even cancers that are big, even the ones that are spread to

break it can actually work. All right.

And so when we give immunotherapy to patients, what we're doing is we're asking the patient's own natural health defenses. We're giving them a little bit extra power in order to be able to wipe out cancer in their body.

Greatest example is President Jimmy Carter. Oldest US living president is going to be 100 this year had retired from the from from political life went and did humanity work by working for Habitat for humanity built houses and underneath the intense Georgia sun got melanoma not surprisingly was on his arm spread to his liver then to his brain and when it went to his brain, at the time, most oncologists would have said, game over.

All right. And in fact, President Carter wrote his own obituary and withdrew from public life, expecting he wasn't going to make it. He said he was ready to meet his maker, but even happened to be that happened to be at the time when immunotherapy was just starting to actually breakthrough.

So he got an immunotherapy called pembrolizumab. You see these ads on TV now, KEYTRUDA. All right. But there's a whole class of them. And I don't want to pay by, but I can tell you he got it.

And after a series of treatments, all of his cancer melted away his own immune system in his nineties with strong enough to drive race out cancer even that had spread to his brain.

All right, Dr. Laura Zinfandel in Paris did a study of 200 consecutive patients on immunotherapy.

Foods That Support Cancer Defense

Only 20% of people were responders in the way that we hope 80% most people did not respond. And she had a hunch that it might the secret might be in their gut.

And indeed, she proved it that in the people who were not responders, compared to the people who were responders, the people who were respond ers had one gut bacteria called akkermansia mucin, a filler that was absent in everyone else.

If you had it, you lived. If you didn't have it, you died. All right. And when she took that bacteria from cancer patients and took it to her lab and transplant to animals, exact same thing happened.

Animals with tumors. Who had it lived when they got immunotherapy that they didn't have it. If she gave an antibiotics, wiped it out, they wouldn't respond to immunotherapy.

So Akkermansia now there is a probiotic that just recently came on the market that for Akkermansia, I'm still doing research on it, having some initial success, I have to say.

But I will tell you that the best way to grow romance here is with pomegranate juice. Drinking just eight ounces of pomegranate juice will help your gut secrete the healthy mucus that Akkermansia loves to grow.

And so I've actually been able to triple the population of this healthy gut bacteria that you need to respond to immunotherapy by with by using food. That's incredible.

So it it almost so you have these 80% that are non-responders. If they would then drink like pomegranate juice, we were able to cut that down to maybe 20%, 30%.

And then you are then supporting them that your gut biome was staying away from things that creates inflammation within the gut and then promotes and with good fiber.

Then all of a sudden the immunotherapy is working, from what I understand. Yeah, absolutely. And although it's a little bit too early to make this black or white, it's clear that it makes a big difference.

And so, you know, as a physician, any any patient I have with cancer, like, there's no doubt that this has got to be part of the approach. And by the way, food is medicine is not something that is prescribed on a pad that the doctor calls into CVS.

No food is medicine is a treatment that people can do at home. So anybody listening to this, this is what you should be doing for yourself hearing about this.

And it's in the literature. I mean, you know, your doctor doctor should know about it because it's actually been published. But like everything else in medicine, it takes about ten years between a research breakthrough before it becomes established in clinical practice.

So that's one thing that's really important. But then, you know, in addition to the gut microbiome and this is an active area of research, there's also foods that can actually help your body's health defenses cut off the blood supply to tumors.

We do know that, for example, tomatoes have something called lycopene. Broccoli has something called sulforaphane. Garlic has something called Allicin.

Orange does have something called lemonade. We do know that blueberries have anthracite needed and so there's in dark chocolate has the same thing. So there are these natural chemicals found in plant based foods that in the lab and in animal studies and in clinics actually can help the body rear itself defenses up, self defenses, right.

Like karate, kung fu, martial arts of the body, right? You want to have mixed martial arts style if you're fighting cancer. All right. And so these types of and I write about this, by the way, my first book Due to be Disease, there's a whole chapter on angiogenesis activating foods to help your body cut off the blood supply to cancer.

That's growing because without a blood supply, the cancer just can't get big. It'll stay there. And then your immune system all race it out. All right.

So this is where cancer treatment is going. It's becoming much more I hate the word to use holistic because then it starts to make it seem like, well, you know, it's only holistic doctors or naturopathy doctors or integrative medicine people.

Look, you know, when we talk about alternative medicine, you know, it used to be about the apricot seeds and cancer versus chemotherapy. Let me tell you something.

I believe that in 20 years time, alternative medicine, I mean, all doctors, all oncologists going to be practicing foods, supplements, new treatments, new biotech treatments, radiation surgery, whatever it takes, you know, mixed martial arts to help cancer patients.

And the and the people who are practicing alternative medicine are going to be those doctors who are only using chemotherapy. That's going to be the alternative medicine doctor.

All right. So we are changing the paradigm as we're speaking of how cancer is viewed being confronted and how it's being overcome. And it's an exciting time.

So so the question always becomes, you know, you have one person with breast cancer, you have another person with with prostate cancer. So you have these different cancers.

Then I would assume that there are kind of a generalized group of food that that should just be included. Like you talked, you mentioned the different foods, you know, to shut down the blood supply to any kind of tumor.

And obviously a tumor without blood supply dies, which which is what we want. And then also, we have different foods that can then be beneficial. What undergoing, you know, certain type of of a traditional oncology care.

But is there also so you know first what is kind of the main group of foods that any kind of cancer patients should do but should you can you also then specialize meaning that I have prostate cancer so these type of foods are more important for me or I have lung cancer and so I should do more garlic or horseradish or whatever it may be, you know, so cancer research gone in that direction yet.

Yeah. So the so the answer to your question is actually there's a little bit of truth in on both sides like both both sides actually make sense. First of all, our bodies, health defenses are agnostic.

They don't care where the cancer starts equated in breast and lung and the uterus could be in the brain. It doesn't care because our body is defending everything everywhere all at once.

Just like that movie title. All right. And so what are those defenses? Blood vessel, defensive angiogenesis cuts off the blood supply to tumor wherever it can.

STEM cells, by the way, our body can actually control stem cells to heal tissues after treatment and cancers also use stem cells. And foods can actually kill cancer stem cells.

Amazing our gut. We talked about the gut microbiome already. Our DNA defenses protects against mutations. All right. For to slow down the growth of a mutated tumor, you want to fix your copy, edit spellcheck and fix those errors on our immune system.

Lowers inflammation and boosts up that immune killing response. All right. So we just went through this whole pandemic thing, you know, where the C-word was, COVID. Let's not make the C word, cancer.

All right. And so the immune system really, really works on wiping out cancer foods, activate all of those health defenses regardless of where the cancer starts.

So any foods that can actually activate your health defenses are really good. Let's talk about the general categories. Okay. Big picture, you want to sort of slice and dice them apart, whole seasonal plant based foods, organic are going to have the most and the highest concentration of those good bioactive natural chemicals that do all those.

Activate all those health defenses. You get to choose which ones you like. All right. But if you go to the produce section of the grocery store, you're likely to find something that's got something that's good for you.

I write I have a list of 300 foods in my book. My first book, you to beat disease. It can activate your body's health defenses. So this is not about elimination or subtraction when it comes to Whole Foods.

Cancer-Specific Food Guidance

This is about leaning into the ones that you like and choosing them. The ones with fiber, with polyphenols, with great bioactive that you like that are seasonal.

Organic, by the way, has more of these bioactive. That's actually the benefit. I like that argument about organic used to be buy organic because you get less pesticides.

Why would I want to pay more money to have something that I never wanted in the first place? Okay, to have less of something I never wanted in the first place.

Okay. But now it's the script is flipped. Now it's about organic, which might cost a little bit more, although the prices coming down actually without pesticides, it turns out that insects that nibble on the leaves and stems of our of the plants that grow our foods, that that that the bioactive that the plant produces are a reaction, a wound healing response to being nibbled on by natural by by the ecosystem.

So that's why organics get even more. All right. Organic coffee is three times more the chlorogenic acid than

pesticide grown commercially, conventionally grown coffee example same as strawberries got three times as much ellagic acid, which is the bioactive.

So that's one category that you want. Stay away or cut down or cut out ultra processed foods. You know the things in a box in a can that have 20 or 30 ingredients that you can't pronounce.

Look, this is not new information, but I'm giving you an into a unit. I'm serving it up in a new context of how this could actually be life saving. This is not no longer about, you know, like looking good for the for the beach.

This is really for people with cancer. It can be a life and death kind of decision. Now, can you actually eat something out of a can or out of a box? Sure.

I'm all about, you know, people should enjoy their lives, too. But really, we're cut down and cut out. You should know that that is something that's not so good for you.

Cut down on red meat, especially oily processed meats. Now the World Health Organization has classified processed meats as a carcinogen. Now all of us know exactly what those processed meats are.

They're the ones that we grew up with in school, in the cafeteria. When we were in elementary school and in middle school, the lunch lady served them the baloney sandwich.

Is there anything, you know, the pepperoni on your pizza? Unfortunately, we don't understand exactly why processing that meat changes constituents in ways that actually provoke cancer.

The last thing on the planet that you want to be eating, if you're actually battling cancer and you want to prevent cancer, you probably want to cut that cut down or cut that out as well.

I always use the word cut down or cut out. I leave. It's a patient choice, you know, it's an individual choice. So what you choose to do, if you really love it, you're going to choose it.

But please don't do it very much because you want to actually focus on the other good activities, I think for to help people understand that they're in control.

You can't make their world black and white and you can't kind of throw them in food jail. You had to let them choose. Those are the two big broad categories cut down on your alcohol or soda.

You know, look, let me just tell you, on a hot, blistering day and we're experiencing this now, you know, all around the world in the summer of 2023, hot, blistering days.

Look, I got it. I'll admit to you, sometimes on a hot, blistering day, there's nothing that's better I can think about in my head to sleep. My thirst with the with a can of soda, icy cold can of soda.

But I can also tell you, as a scientist and a doctor, that's probably the worst thing that you can do for your health, especially you've got a cancer if you're a cancer patient, because the huge amounts of sugar in a regular soda really help to spark inflammation in your body.

People say, you know, sugar feeds cancer. It's actually true. Not the same way that the that the average person thinks about it. But yeah, why would you want to take that chance?

And then secondly, I can tell you that the sugar of regular soda will cause insulin spikes. People talk about glucose spikes. I don't worry about the glucose spike as much as I worry about the insulin spike and a high levels of insulin.

You know what? Because a make for your body to make insulin. In order to make insulin, it needs a factor called insulin like growth factor, which is sort of like the, the, the, the parts that your body needs to make insulin these are

the little pieces and you're on the model said it's got to glue together to make insulin I must have insulin requires high amounts of insulin like growth factor IGF one.

And guess what IGF one at high concentrations is a fertilized ISAR for cancer. It makes cancers grow. Why on earth would you want to do that? So think about that when you're looking at soda cakes, candies look a little bit once in a while you got to live, right?

I mean, life is for the living, but you got to realize it ain't good for you. It's actually really bad for you. All right. Especially you've got cancer.

Now, what about diet sodas, non-nutritive sweeteners? Artificial sweeteners? Probably just as bad, if not worse. You know why? Because study after study after study after study is now beginning to suggest that those artificial sweeteners, which our body doesn't absorb, they give us a sweet hit on our tongue, but our body doesn't absorb this that are non caloric.

You're not going to get fat from that. Actually, it's not quite true. Turns out that those artificial sweeteners poison the gut microbiome. And when your gut microbiome is actually hurt, guess what happens now?

Inflammation rises because it can't fight it. Now cancer is going to start growing faster. Not a good situation for you to be in. So sodas I would put those diet and regular in that category of, you know, whole foods based foods good even dried foods.

You know, there are some middle aisle foods that are good beans, you know, legumes. All those things are actually really good. Even ten fish. If you actually if you're not a vegetarian or vegan, those can actually be good.

You should make choices. But all that other stuff, move it off to the side. That's the stuff you want to kind of downgrade. Like I said, cut down to cut out.

Now, do you want to get into the individual foods? We're beginning to actually study those individual foods to know exactly what they are. And this is where the organs come in because of research.

Look, I'm I kind of use science, you know, sort of there's a great quote from the author, E. L. Doctor, who once said that he's a novelist, that writing is like driving at night.

You can't see beyond your headlights, but you know exactly what's there in front of it within your headlights. And I think that's where science is. There's a lot we don't know yet. We're going to make that journey.

All right. But we need to focus on what we do know. So this is where the organism we know, for example, colorectal cancer. We know the green tea has been studied to lower and improve outcomes for colorectal cancer.

Breast cancer.

Food as Medicine and Closing Thoughts

We also know green tea is in that category, but we also know that soybeans and soy products and soy foods, contrary to urban legend, that women who eat more soy products actually live longer when they have breast cancer because the phytoestrogens in soy don't spark the breast cancer to grow.

It blocks the breast cancer from growing. All right. I always say these urban legends come from well-intentioned people who are not scientists, so they try to connect the dots.

So I give them credit for trying to connect the dots. But look, you know, truly, the goddess in the details of understanding the complicated science. And it turns out that that the phyto estrogen doesn't spark growth, it blocks growth.

And they also cut off the blood supply, a tumor. We found this in breast cancer. Now, what about prostate cancer? We're talking about common cancers in men and women.

Tomatoes have been shown, oh, our tomatoes got left in and aren't they nightshades again? Urban legends. I want to put that to bed right now. There's no study that's shown that tomatoes are a deadly nightshade poison and that the lectins of tomato are harmful to the body.

It's a good idea. It's right in a certain kind of way, but it's so wrong when it comes to actually human consumption. Studies have shown in 30,000 men, it's called out health professionals follow up study that those men who ate more tomatoes, specifically 2 to 3 cups of cooked tomatoes, cooked tomatoes per week, had a 30% lower chance of developing prostate cancer.

All right. But what said that tomato, lycopene, what does lycopene do? Well, it does a lot of different things. It's fat soluble. So when you eat it, it gets into your bloodstream and it actually dissolves right into your fat and it fights harmful adipose tissue.

It fights harmful body fat by fighting harmful body fat, you lower inflammation because fat causes inflammation. Excess fat causes inflammation. Tomatoes can help combat that.

Lycopene also cuts off the blood supply to tumors, starves cancer so it can't grow. This has been shown in the pathology slides of prostate cancer patients who are eating tomatoes. Right?

So this is where we're at. Food as medicine is not a bumper sticker, not a T-shirt. It's not a homecoming flag. It is real science now. And people like me who study this are really beginning to help get the word out that we're going to go from the sort of general belief system into having the evidence.

We have to take a look at what the data is, and we need to start to nail things down to what specific foods are good and what specific foods are bad. And this is really going to be really helpful, I think, for anybody watching this, that to know that if you if you've got cancer, you're helping somebody who has cancer, that this kind of research is moving the needle and helping.

But the power back in the hands of the patient who has cancer, struggling with it in order to be able to do something for themselves and not only rely on the health system or the colleges.

Yeah, I love that. I'm going to I love that, you know, you're pushing for the evidence, pushing for this science because it is out there. And obviously, you know, food becomes our our best drug because we do that every day.

We do that several times throughout the day and recognizing them that everything you put in your mouth, then can either move you towards health or away from health.

And it's scientifically proven. And so so this is wonderful with Dr. Li. This it's always a pleasure. I'm so grateful for you bringing this science to the forefront.

Thank you so much. Thanks very much. It's a pleasure. Thank you. Dr. Li