

## What is Cancer? Beyond "Rapid Cell Growth:" The Truth About Why and How Cancer Grows

Nathan Crane interviewing  
Dr. Thomas Lodi, M.D.



Nathan Crane:

Hello everybody. And welcome to the global cancer symposium. two point zero, my name is Nathan Crane. I am the award-winning filmmaker of cancer, the integrative perspective, as well as the director of the health and healing club, which you can learn more about after this [interview@healthandhealingclub.com](mailto:interview@healthandhealingclub.com). And today I'm really excited to bring you Dr. Thomas Lodi. We're going to talk about what actually is cancer in the truth about why and how cancer grows. And this is a foundational talk. That's a part of this event. It's really important to understand what Dr Lodi is going to be sharing with us. If we want to have any chance at all, preventing or reversing cancer. So I'm gonna read you Dr. Lodi His bio. We're gonna welcome him in and hope you have some note, some note, paper, something to write with because Dr. Lodi is a wealth of knowledge. I learned something new from him every time we talk, and I think you will as well. So Dr. Thomas Lodi has been practicing medicine for over 34 years now for the first 10 years of his medical career. He worked as an internist, urgent care physician and intensivist in ICU and CCU departments of various hospitals in New York in 2002 established one of the first integrative oncology centers. And in 2005 founded an Oasis of healing in Arizona, which is still active today. I interviewed the current medical director there in Arizona, Dr. Nathan Goodyear, as part of this series, we talked about really the most important aspects of the cancer healing diet that they're implementing there. You should go listen to that interview right after this one. And their website is an Oasis of healing.com. Dr. Lodi has been licensed as a medical doctor in the state of New York since 1987. And there's a homeopathic medical doctor in the state of Arizona since 2002. Dr. Lodi is a founding member of the international organization of integrative cancer physicians and an active allied member of the American society of clinical oncology. Since 2012, he founded and served as the chief integrative oncology consultant for several cancer centers in Bangkok and Thailand, Malaysia, India, Vietnam, and Dubai, and is currently the founding member and CEO of Oasis international and Phuket, Thailand, which is actually where he is joining us from a day ahead of us in the morning. And we're a day behind when I'm recording this in the evening. So I'm glad our timing worked out. Dr. Lodi, thank you so much for joining us.

Dr. Thomas Lodi, M.D.:

You're welcome. You're welcome. It's glad to be back.

Nathan Crane:

Yeah. It's been a few years since we've connected.

Dr. Thomas Lodi, M.D.:

A few years. Yeah, I think originally, I mean, cause I moved to Thailand in 2012, so I don't remember when you were doing the filming for the original, was it before 2012? It must've been.

Nathan Crane:

A couple of years after that, but we were doing some conferences there in San Diego that you were speaking at some online summits, magazines, all kinds of things that you were a part of just because your work is so instrumental in integrative care for helping people with cancer. So yeah, I'm super happy, excited to be connecting with you again.

Dr. Thomas Lodi, M.D.:

Okay. Me too.

Nathan Crane:

So let's dive in. The most simple, but profound question I think I can start with is what actually is cancer.

Dr. Thomas Lodi, M.D.:

Yeah. And that's really a perfect question. It's a great question. And it's and I think once people understand what it is, some of the mystery of course goes away. And we have to understand that a lot of fear it's just based on ignorance we don't have it. So knowledge brings the knowledge, shines the light on things, and you understand it. Cancer is actually a very simple natural homeostatic, which means in biology, homeostasis is the processes and qualities of an organism to maintain its functional integrity. It, no matter what happens like you get pushed, you have a biomechanical homeostasis, your leg goes out to hold you up, so you don't fall. Okay. You're eating too many cheeseburgers and Denda pizzas and your arteries are getting clogged up. But your knows you need to keep the flow of blood to your heart and your brain. So how do you maintain flow with clogged up arteries? You increase the pressure. So you go to the doctor, you are high, you have high blood pressure. He said, no, no, no, no. The problem is the pizzas and

the kabobs and the things like that. I stopped that. Yeah, I won't. Yeah. So anyway, so the, and same thing with diabetes and cancer and all that, so we gonna talk about...

Nathan Crane:

Right. You go, I just want to mention that you go to the doctor and they say you got high blood pressure. We need to give you some medication to lower your blood pressure. And what you're saying is no that's not what you're trying to do. You're not trying to lower the blood pressure. You're trying to get rid of the things that are causing your blood pressure. so high

Dr. Thomas Lodi, M.D.:

Exactly. Because what we're identifying here, what we're focusing on. And this is very important is we need to eliminate the myth of disease. Okay? There's no such thing as an entity called a disease that gets into you. Like you have diabetes, where is it? You know, is it in my elbow? Is it over here? You know, did I catch it? Is it an it's not an it. So in other words, what I'm saying is that the body is always, and it's designed and not just our body dogs' bodies, cats bought elephants bodies, trees. They're designed to maintain functional integrity, regardless of what happens. It's called adaptation. It's called homeostasis. So if I'm eating all this stuff, right, and my arteries are clogged up and I need to keep the blood flow, my body will naturally increase the blood pressure to keep me alive right now. That's not a long-term solution, but it's the only thing that could be done at that time. Right? So if I go to a doctor and I take drugs, and those drugs actually dilate my arteries artificially so that the blood pressure goes down, what's happening now, I'm now I'm not getting the blood flow to where my body intended it to go. So my brain is not getting it. So I have a low level hypoxia or low oxygen. I have a low oxygen level in my heart all over. And what we know now about people that have been on antihypertensives for 20, 30, 40 years now, is that they have a higher incidence of cancer. Why? Because they're continually, even though it's low level hypoxia right around the body. So anyway, so in other words, the body, whatever symptoms you have, whatever's going on is your body is already adapting to a situation. So you need to just change the situation and then your body no longer needs to do that adaptive dance that doesn't have to do the high blood pressure dance that the cancer dance. So what is cancer? The fundamental, the fundamental process that. All cells, whether they're bacteria or elephants need to do is produce energy. In fact, 50% of the energy that our cells produce are required just to keep the cell function, just to keep the we have what are called sodium potassium Gates, and we have all these other things that keep the cells intact just to keep all that intact. So that before the cell does any work, just to keep it shape and all that 50% of the energy is used just for that. Now, if the cells are going to do any work and then have to adapt to something, it's going to need more energy. Okay. So energy is the fundamental requirement. And that's why it's paramount. So in ourselves we're not like bacteria, but in our cells and all the higher organisms, there are these little

organelles inside the cells called mitochondria. They produce the energy, they grab glucose and they grab oxygen six oxygens, one glucose, and they produce a total net total of about 36 to 38 ATP ATP is the currency of energy. Okay. And you can imagine, we have 100s of 1000s of these little mitochondria in ourselves. It depends on the Oregon. Like the heart needs more cause it's beating. Right. Cause it, in one day, let's say, you thought you did nothing all day. You sat on the couch all day. Your heart was beating 100,000. So. That's pretty amazing, right?

Nathan Crane:

100,000 times a day interesting about that. As well as I can cause I'm an athlete, I'm a CrossFit athlete. And so I used something that kind of tracks my heart rate and my rest, my recovery, my sleep, my calorie expenditure, all that stuff. And I can be on a total rest day on a Sunday and do nothing, just lay around all day. And my body's still burning over 2000, 2,500 calories in a day and I've done nothing. Right.

Dr. Thomas Lodi, M.D.:

Right.

Nathan Crane:

The body's expending, all that energy, just processing, regenerating, doing all these things that you're talking about.

Dr. Thomas Lodi, M.D.:

Well I'm a 10 with 36 zeros after it. Okay. That's a big number, right? A 10 with 36 zeros after it. That's the number of chemical reactions that are going inside of our bodies every second, every second. So you just if you think about that and then you realize there's like 60 to 100 trillion cells, you realize that this is an incredible, incredible thing. I mean, and who, the question I ask is who's running the show. Certainly not me. You know, if I had to be responsible for my digestion, I'd be after eating, I'd be stuck in the room all day, just, okay, it's a creep you can't.

Nathan Crane:

Yeah. And we'd be dead if we had to be responsible for any function in our body.

Dr. Thomas Lodi, M.D.:

Right. Can't do it. So anyway, it's pretty amazing. So anyway, now these mitochondria, because they use oxygen because oxygen is necessary to get this high yield of energy from the glucose that you get, what are called reactive oxygen species, they break up and they're called free radicals. Right? Well, we, in the process of getting the energy, those free radicals are necessary.

They're useful. The electrons from those free radicals are used, right. So that's how we gather energy. But what happens is they begin to accumulate and they produce damage also. So they can also this other kind of like a double-edged sword. It's like oxygen is really, really important, right. At 21%. Right. But you put a mask of oxygen on, at 100% and within three weeks you've got emphysema. Okay. Cause you've just the oxygen will destroy. So we need without it, you don't live for five minutes with too much of it, you're going to get really sick. So in other words, that's it's like that with everything, but I'm just talking specifically now about oxygen. So in the mitochondria, you wind up getting those reactive oxygen species, which are like free radicals. Now because of that, those mitochondria are the most vulnerable to whatever happens, whatever kind of unfortunate situation happens. You know? So now if you consider our lifestyles were, and you can't say what caused my cancer. Well, it's not one thing, it's everything, right? So it's diet, it's the time you go to bed. It's the amount you exercise, this amount of alcohol you drink, it's the relationships you have. It's your ability to forgive. And I mean, love it's how many deep lies you will. I mean, I've learned a lot in the last 10 years about how important the mind is, but all of these things conspire to challenge the cell and the most vulnerable parts of the cell or the mitochondria. Well, when 40 to 50% of them become dysfunctional, okay. Through a myriad of things, including EMF, we can't leave EMF EMF, right. And now 5g, who knows. But anyway, now the cell needs to survive and what does it need to do? It needs to produce energy. So it reverts back to the only primordial way of making energy. That's called fermentation. So it starts to, from me and fermentation of glucose is how you make wine and cheese. And that's just, it's a fundamental way of making energy, but it's clearly, I mean, it's extremely inefficient. Whereas with what we talked about before the mitochondria produced 38 ATP for every one glucose with fermentation one glucose produces only two, which means it's 19 times less efficient at energy production. So therefore in order to survive in order to keep this multi-trillion celled organism functioning with enough energy, right? All of those cells that get that lose their mitochondrial function and have to ferment, they say it signals to the nucleus to now turn on and turn off genes. So you can have a new program for the cell that supports this new metabolism, this new metabolic requirement, right. We're now going to deal with, instead of a mitochondrial oxidative phosphorylation metabolism, we want to deal with a, what they call fermentation. I'll just call it a fermentation metabolism. So it turns on certain things. One of the things that turns on is it upregulates the production of insulin receptors. Why? Because cancer cells need more sugar, need more glucose, right? They're 19 times less efficient. So you can't change. What's inside. You can't change the mechanism. So you have to give it more fuel. So you give it more. It's like you think of those old trains, those coal trains, where the guy was shoveling the coal into the train, right? Well, the more he shoveled into the engine, the faster we'd go. And that's the same kind of thing so that the cell needs to get all that. So that's what happens. It upregulates that it upregulates this enzyme and that enzyme, it, down-regulates all these things all those genetic

expression changes or what we call uncle G. So in the end, when you're sitting there and you say, aha, you have the, this M cast, you have whatever it is, whatever your P 53 or whatever it is, all these things are really they're done to support fermentation. So what cancer is, is a chronically fermenting cell. That's it? Nothing more and nothing less. The other question I don't think I want to jump into is that whether you have cancer in the brain or the breast or they or the pancreas. Okay. The only difference is the first word. Okay. Location. The second word is cancer. Pancreatic cancer, breast cancer, brain cancer, colon cancer. Okay. So now I want you to understand that you don't have a different kind of cancer. There's no different kinds of cancer. It's all the same. And it's the location that would make one more serious than another. I mean, serious. I mean more has a worst reputation like pancreatic pain because of its location. If it grows even a half a centimeter, it's already in another organ, you're in stage four, you're compromised. Whereas a breast tumor could grow several centimeters and still be a stage two or three. So that's without affecting physiology. So really I want people to understand that. So when you say, Oh, I have this really rare cancer, rare means they haven't found it beginning in this particular cell type often, that's all it means, but it's still the same, which is why the therapies to reverse. It don't have to change. They're the same as well.

Nathan Crane:

And that, so that's true for whether it's lymphoma or it's a blood cancer, or it's a tumor doesn't bone cancer. It doesn't matter. It's the exact same process. It's just one might be, a worse experience or faster or whatever than the other.

Dr. Thomas Lodi, M.D.:

Exactly.

Nathan Crane:

So, I wanna see if I got this correctly, if I followed along correctly, the fermentation process is almost like a built-in redundancy to keep us alive, right? So that's like, we're not feeding ourselves what they need. They're being depleted. They're being damaged through oxidative stress, through mental, physical, emotional stress, wifi, you already named a lot of the causes, diet or diet too much, not enough exercise, et cetera, et cetera, the cells, the mitochondria start dysfunctioning and they go into the fermentation process basically to keep us alive. But in the fermentation process is actually, what's turning the, those cells into cancer cells, right. But they're producing some energy to keep us alive. And so cancer is actually prolonging our life. Is that I believe I've heard you even say that.

Dr. Thomas Lodi, M.D.:

Yes, exactly. It's an adaptive response. And let's say a tumor in the breast. If that didn't happen if it didn't adapt, it would've become dead. It would have died. The tissue would have died and dead tissue is called the necrotic tissue and dead tissue is a, becomes a nest for bacteria and other Micheal organs. They love it. They, would go there. You would get a horrible infection, would probably get into the blood and you would die. You know? So, I mean, it's really, you have to understand that about cancer, but that's absolutely what I wanted to. It's not only the affirmative. It happens every day. When you exercise, if you let's say you sprint up to the corner, okay. And you haven't been doing this in awhile. By the time you get up three quarters of the way you're starting, your exit legs are starting to ache. You get up there and you're going, what happened? Well, you're because you're not in shape. Or even if you are in shape, then it might take a little longer to get to that place. But you will get to the place where you will have exceeded your ability, your ex, your oxidative ability. And now you start to ferment your cells start to present. It's called glycolysis.

Nathan Crane:

I was there. I did that this morning.

Dr. Thomas Lodi, M.D.:

Yeah. And then the glycolysis, the co the end result is a lactic acid. And that lactic acid is what makes your legs sore. So when you're feeling that soreness, you're all you realize that your body's fermenting and then you go, you blow off the carbon dioxide, which equilibrates the, and then you're okay, well with cancer, you can't do that because even blowing off the carbon dioxide, you don't have the mitochondrial to begin that really efficient process again. So you're stuck in permanent. So we can live in cancerous, permanent, or not permanent, but at least chronic, chronic fermentation. And by the way, it can be turned around.

Nathan Crane:

So. If our bodies, so going back to the exercise analogy, if our bodies didn't have the ability to release that carbon dioxide and then allow our system to flush that lactic acid out, basically, that would all become cancerous. Is that what you're saying? But it doesn't become cancerous because we're a little bit flushed out.

Dr. Thomas Lodi, M.D.:

No, cause cancer would have to, we'd have to destroy the mitochondria to get cancer. Cause that's the thing. Yeah.

Nathan Crane:

It's like an initial fermentation process. It's not the full.

Dr. Thomas Lodi, M.D.:

Right, right, right. Yeah. It's and it's fermenting, not because it lost the mitochondria, your cells got overworked, then you don't, they're not quite efficient. So they temporarily had to start fermenting, and then you have to slow down and get rid of the carbon dioxide. And now you can go back to being.

Nathan Crane:

And now your body is just adapted and you've, increased your a little bit. So the next time you do it, you can go a little bit harder. A little bit further.

Dr. Thomas Lodi, M.D.:

Exactly. Yeah. Training.

Nathan Crane:

Yeah. So, okay. So I love how you explain that. So it's kind of pose a couple of questions. It's come up. Why then are all these cancers? You say the cancer, the cancers, the cancer it's cancer, but why are they so different in the terms of where they show up and why they show up in these different areas and these different types of cancer?

Dr. Thomas Lodi, M.D.:

Right. Well, depending on the insults or the challenges that the cells had, we'll determine whether or not it becomes cancer. So let's say that a woman is living a lifestyle, and I've got her from the beginning, what's the word acknowledge the fact that there's another thing about cancer too. Sometimes we don't understand it. I have had not all, most people, they've, what's happened in their lives, but some people come to me, God, I grew up on an organic farm and I was active and all of this and I everybody's surprised how I, why I get cancer. Yeah. So th so a lot of times we cannot identify what happened and that's, and for the same reason, there's a small percentage of people who do all the right things and it doesn't work. So, but those are very small. Yeah. You have to understand when I'm talking right now, I'm talking about the vast majority of people, 95% plus of the people. Okay. There's a small percentage that we just never understand it.

Nathan Crane:

Well, that's it, I've found with people who I've talked to like that. Sometimes if you dig really, really deep, even somebody says, Oh, I had a great childhood. Or I had, and you dig deep. And it's like, Oh, there was this huge traumatic event that they forgot to mention. That's still with them subconsciously today that has been an underlying stress for 35 or 40 years. Right. So there's those things too, that aren't really clear .

Dr. Thomas Lodi, M.D.:

Absolutely. If you dug down and that's it, if we have a chance to, let's talk a little bit about the mind later, but anyway, so if a woman, let's say a woman is exposed to the normal lifestyle that we have here in the 21st century, and her hormones are not balanced, right. She's got too much estrogen and not enough progesterone she's even got too much prolactin. She's got that kind of thing. Let's say she wears a bra all the time. She never she doesn't take it off except for when she sleeps. Right. Which pre decreases the breasts ability to move as lymphatic. You know, we know there's actually a correlation between the number of hours a woman wears her bra or abroad during the day and her risk of breast cancer, so the less wearing it, this is relatively modern invention. It came about actually with the Howard Hughes invented the bras that women wear today for Jane Russell in a movie called gentlemen, prefer blondes with Marilyn Monroe and Jane Russell. And in fact, Mary Jane Russell was given a contract. If you wear this bra in this movie, you will get 1000 dollars a week for the rest of your life. And, in the 19th, what in 48, or whenever it came out, that was a ton of money. It's still not bad. You know, if you, got 1000 dollars a week for the rest of your life, but anyway, that's where the new bra, this bra came and this brought actually decreases a woman's her breath. Cause normally in a healthy, natural setting, as a woman walked her breasts, her breasts would balance. And as they bounced, they would... the lymphatic system would circulate and all that it's natural. Right. It reminds me of the Hawaiians, back in back when the white men first came to white, they weren't wearing Brooks. Right. And they were not, and they were surfing and they were healthy and large. And we said, no, you got to wear bras. It's terrible because you know why in Hawaii, they didn't think of the bra as the breasts, as sexual objects, they thought breasts were for the babies, not for the men. Right. So they had a whole different perspective on it. Right. But we came in anyway. So now we've got really sick of Hawaiians. But anyway, so if a woman has that constellation of exposures and the hormonal imbalance, then it could show up in the breast, it's more likely to happen in the breast. Right. That's where it'll happen. So there's always, for example, pancreas, we know that pancreas seems to happen with people who not always, but often people eat a lot of cooked carbs. Okay. So if you're eating a lot of cooked carbs and you've got all these kinds of stresses, and there's other things too, that we might not be aware of, for example, microorganism, we know that we have a dysbiosis, we're dope. You know, one of the things about probiotics that is really important for everyone to understand, and that is you can take probiotics all day, every hour, Oh, I pick my

probiotic, but if they let those, if those bacteria, once they get into your system, don't have the food that they need to eat. They're going to pass right through. So in other words, your, the bacteria that exists in your gut are there will we'll survive based on the food. So if you have a fast food diet, those, a certain set of species that will exist in there. If you have healthy diet, if you eat a high, heavy meat diet, you'll have a certain set of certain groups, species that survive in there. So don't have to worry about the bacteria, worry about the environment, that's your job. Your job is to take care of the environment. So.

Nathan Crane:

And that's where prebiotics really are probably be a more and more important than taking probiotics. Right.

Dr. Thomas Lodi, M.D.:

Right. Right. Cause remember you've got more bacteria in there. Then you do cells in your body.

Nathan Crane:

Right.

Dr. Thomas Lodi, M.D.:

You know, they're going to replenish themselves. You can't knock them out.

Nathan Crane:

And that's we're talking anything with inulin fiber, right. When we're talking about prebiotics and that's pretty much fruit and vegetables to make it simple.

Dr. Thomas Lodi, M.D.:

Exactly. Exactly. So the more that you eat them, well, the more that you eat, the more of the kinds of species that we need for our heads will survive. Now. Some you're eating a different diet. You'll it'll speed. It'll be good food for a different sort of species, which are actually pathological, which would cause us all sorts of problems. Okay. And we know that the gut and the brain are connected right. In terms of thinking and feeling it for good. So imagine you're eating a certain diet, so it's going to affect the way you think and you feel, and you respond. It's all very, very important.

Nathan Crane:

What about the craze of, okay, so just to wrap up there, the reason these cancers are gonna show up in different parts of the body is we're still learning some of those things. But like you said

hormones out of balance more often than not, it's going to be in the breast. If it's a lot of good carbs could be pancreas of a different reasons are causing it, show up in different places.

Dr. Thomas Lodi, M.D.:

A lot of meat has colon.

Nathan Crane:

A lot of meat is colon. That's kind of where I want to go next, which is this whole craze about the carnivore diet? Like, talk about that for a couple of minutes.

Dr. Thomas Lodi, M.D.:

Well it's astonishing to me that it even became, well, I guess I shouldn't be astonished because people are always looking for ways to justify their vices. Right. They're always, they love to justify their vices. Right. You know? And so clearly it's not a sustainable diet. You we couldn't do it because our, okay. First of all when you want to say, what is a proper diet for any organism on the planet, right? You have to understand that Oregon organisms, anatomy and physiology. Okay. So you got a an elephant, right? With this anatomy and physiology will tell you exactly what it should eat. You've got an ant eater with the long nose and the long tongue, right? And that w that the, you know what, it's going to eat a tiger. Anyway, our bodies, our anatomy and physiology was there. The reason we have to debate about this is because we were forbidden by our periods to be instinctual. We were not allowed to follow our instincts. Our parents insisted. And then we insist our children to be culturally appropriate. So all of our responses are cultural. We've been in culturated. So we don't know what would be our natural diet, because if you're in Thailand, you're eating one kind of food. If you're in Germany, you grow up eating another food. If you're in Africa, you grow up eating another food. And then each country thinks that their food is the best. And the only one that people should eat, and it becomes your appetite. It's what you crave and it's your emotional things. So, but that's what that food. But anyway, our anatomy and physiology is such that we are we've. We look at gorillas. If we look at chimpanzees, these are our cousins, you know? W why do I say cousins? Well, we may have what? 67, 65% percent, same DNA as a dog. Whereas we have 99%, same DNA as a Chimp, right? Doesn't mean we came from Dodge. It doesn't mean we came from, it just means that we were designed on a similar structure or we have four chambered hearts. So do they have four chamber heart, right. The heart long apparatus the whole thing of the kidneys, that's a good system why would God have to make several systems once one good system. So, anyway, so our cousins aren't inculturated. So they eat out of instinct. Right. And think about it. Let's say you had a 14 month old child. Oh, you had one from every country. One from Ethiopia, one from Afghanistan, one from Kansas, a one from Australia all over China. And you put them each individually in this little playpen with an Apple and a rabbit.

Okay. None of them are going to eat the rabbit. They're all going to be attracted to the roundness, the redness, or the greenness. They're going to, unlike it's round, it's got the shape. It's got something that's intrinsically attractive to a young human. Right. And they're gonna lick it and taste it. And they're going to play with the rabbit. That's instinctually. We're not instinctually there to do that, but we're forbidden that are our mothers saying, and fathers, no stop. Don't no stop. Oh, don't do the muscle. By the time we're three, our appetites are formed. So you may, and you know that you're a father. You can tell a two year old what to eat. You cannot tell a four year old with eat. Okay. So by three appetites are formed, right? And that's the tragedy. And you have until three to get it right with your kids. Okay? If not, you're going to spend the rest of your time trying to fix it.

Nathan Crane:

It's a really good point. You brought up because my. Dogs who I have trained as puppies too, or not even trained, allowed them to eat instinctually, right. If I put a rabbit in front of them, they will kill the rabbit and they'll eat it. Raw bones, skin, everything, though when we're out running, they will hunt rabbit. I never taught them to hunt. I didn't teach them nothing. I just, I gave him meat, raw meat from time to time and never stopped them from trying to catch a rabbit when we're out running and they'll catch it, they'll kill it. And they will eat it. All of it. They'll pop the intestines open and the stomach filled with crap. And that smells horrible and they'll eat all of it. And they love it, you know? And they that's a true omnivore right now, if we were true omnivores, like you're saying, like, if we were meant to eat quite a bit of meat and maybe some plants, I think we would crave that raw meat, the bone, the, all of it, just like my dogs.

Dr. Thomas Lodi, M.D.:

Exactly. You know, you're exactly right. Dogs, all omnivores have to be capable of killing an animal. Cause the, by the fact that they're an omnivore. So the, what does that mean? Well, that means that they in it for mammals, they pretty much need to have a snout. Okay. So what are the famous omnivores that we know of dogs? Rats. And who's the big guy, the bear. I mean, you know that the bear is like 80, 90% vegetarian, right. This big, massive thing, but it's got the snout and it's got the claws it's designed. So when it needs to kill, it will. So dogs are scavengers they're on the war. Scavengers. You can actually, if you got a 12 year old dog and it's not, and it's kind of losing its energy, you can change it, switch it to a vegetarian diet. You'll get another four years out of it because they'll live. Cause there'll be getting less garbage. I've done that a few times with dogs.

Nathan Crane:

Oh, now that's just not feeding them. The, dead dry dog food. You're giving them fresh fresh food plant. Vegetarian. What about putting them on a, like a raw meat diet with some .

Dr. Thomas Lodi, M.D.:

Right. That's what I've seen now is that that's the best.

Nathan Crane:

Yeah.

Dr. Thomas Lodi, M.D.:

You, put them on a raw meat diet, especially from early on and they'll live long. We have to. Yeah. Anyway. So just like it works for them. It works for us as well.

Nathan Crane:

Yeah.

Dr. Thomas Lodi, M.D.:

But anyway, so, we can get, I won't, we... first of all, if we were carnivores, if we were on the boards, then we should like use pointed out, should be attracted to, I mean, we should see a cow walking in the past year and go, no, we don't do that. We're not excited by that. We're excited by the steak it's been removed, it's cooked. It's got a smell. It has sauces on it. We're not excited by a piece of bloody flesh. That's not what we even instinctually. We're not like that. Now some guys that want to beat their chest. Yeah. There's some bizarre people that will do anything. Yeah. But that doesn't mean that's where humans are. Humans in general. Don't are not attracted to that. And I think the origins of cooking came from meat because, when we were eating, broccoli and apples, you would just eat it. Right. You just eat it. It's a good, but when it came to flash is kind of disgusting. So you got to do something to it. So of course he-

Nathan Crane:

And our bodies, are really designed like an herbivore, right? Our long intestines are teeth that are made for chewing, grinding, plants and vegetables and things like that. Isn't that true? I mean, if you really look at carnivore omnivore, herbivore, our bodies are much more like an herbivore than either of the other two.

Dr. Thomas Lodi, M.D.:

Well, we don't have a Snell, right? These, you can say these are canines. They're only in the canine position, but they don't come below the inside here. So they do function as an incisor. They're not

piercing. Dracula has that, but not the average non a vampire. Okay. So vampires have it. The empires can eat meat eat. eat meat. Right. So we weren't. But anyway, yeah, but the omnivore, the omnivore doesn't chew, they go, and their jaws only move vertically. Their teeth are sharp. Their tongues are thin, so they can let you know, they're long and thin. Their digestive tract is short and straight. Their livers produce a lot of your cases, an enzyme that breaks down your gases, which is a by-product of protein, because they have to have that. And they don't sweat. They pant, they panicked. Okay. And those are just some of the qualities or aspects of the omnivore and carnivore, whereas the herbivore just go horizontal and vertical. We have full cheeks, remember dogs and cats don't have cheeks. They don't have lips. The reason is that's why, when they're chewing something, it'll fall out. They have to pick it up. We have the cheeks with the lips, and we have flat teeth for grinding. And our tongues are thick and muscular. And, we have an enzyme in our amounts to digest starch, not to digest protein. Okay. So, and what is start to start just fruit, right. And starts it's in vegetables and stuff like that. Glucose that's what, how do you argue with that? Now? What goes into a long, I mean, it's 10 meters or 30 feet from mouth to rectum. 30 feet. Okay. So alcohol use six foot. So, it's what six times, no, five times the size of your whole body. But when we look at carnivores versus herbivores, the torso, right. In a, carnivore or the torso, or I'm the war, the torso is three times the length, the intestines are three times the length of four. So when we look at what we are herbivores, it's six to nine times.

Nathan Crane:

Wow.

Dr. Thomas Lodi, M.D.:

So if you figure on me, this is probably about almost a meter, maybe three, maybe two and a half feet. Right. And 30 feet of intestines, ah, there we go. Yeah. So that's a long way. So the problem is when you eat meat, when you eat foods like that, that don't have feet and hands, like if you're eating broccoli and cabbage and things like that, it's got cellulose and digestible and it's going to, it kind of moves its way through the intestines and it brushes it and cleans it. And that goes through there. Okay. Whereas something that doesn't have that just gets pushed along and it's harder to digest that. And it's an acid when it, if it sits around too long, it begins to pitcher by, and then putrefaction produces these chemicals that are carcinogenic, that are all kinds of problems. And maybe even the most important thing. The thing is, it's food for a different species of bacteria. And so our microbiome change. So now we've got petrified flesh sitting in our, somewhere in that long, 30 foot tube with a different kind of bacteria and we're going, Oh yeah, that was great. Right. And, we have gas coming out of both ends. I mean, no wonder. So anyway, this long-term, I really want to see it. I've got a guy here actually at the, our center. He and his father are like, they've got YouTube channels. They are carnivores where you're not, you can

pretend you're a carnivore and you're going to see what happens. Your body was not designed for it. And it's theirs. It's not a long-term solution. Okay. It's just like ketogenic diets, ketogenic diets work really well in certain circumstances and can be used, but they're not sustainable. You can't stay on a ketogenic diet. If you let's say, you're you do it for medical purposes, you might. I would say what I tell people with cancer. If we could, we've been able to develop a vegan, ketogenic diet, raw vegan. It's a very difficult, but you do it for four to six weeks. And you got to keep your glucose to ketones ratio at less than one point zero, your glucose to ketones ratio. Okay. If you can do that for six, four to six weeks, then you eat for two to three months, a healthy diet. Then you do it again for four to six weeks. Then you eat a healthy diet. It's not a sustainable thing because in order to be keto, in order to produce enough ketones, you've got to be, you have to have an excess of these nutrients and not enough of these nutrients. So it's not it's, it won't work. So really our diet is the variety.

Nathan Crane:

Yeah plant-based diet, variety of vegetables, fruits, nuts, seeds, legumes, herbs, all of it, right? Barry's a ketogenic diet. The reason you're doing a short term, raw organic plant-based ketogenic diet is just to reduce inflammation quickly. So is that the reason why you're doing it in those extreme cases?

Dr. Thomas Lodi, M.D.:

Right? That, and also cancer is by reducing the glucose. There's no reducing the glucose. The cancer has a hard time living right now. Remember cancer though. Cancer has one other fuel source. It's called glutamine, which is an amino acid. So it can switch to glutamine. And that's the problem. And that's what you see. In fact, there are some cancers that don't show up by pet scan. You know, pet scan is where they inject the radioactive glucose. So there are some cancers like that, and those are mostly glutamine, right? So we have to, and what's the ultimate, what's the only diet in the world that eliminates glutamine and glucose. It's called H<sub>2</sub>O water.

Nathan Crane:

Water fasting.

Dr. Thomas Lodi, M.D.:

Water fasting. And I, have to tell you, I had a lady come here, stage four, breast cancer told she didn't have six months, did a 41 day water fast, went back to England two months later to get a pet scan. It was absolutely clean. So.

Nathan Crane:

I mean, that's incredible. And water fasting is like really intense. So you need to be with somebody like yourself, professional guidance to help help you through it. Right.

Dr. Thomas Lodi, M.D.:

You're going to go past two weeks.

Nathan Crane:

Yeah. I wanted to say too, we do have an interview with the founders of mastering diabetes. I'm just going to mention here, but I do encourage everyone to go listen to that interview. One of the things that all the research shows and what they talk about is that in the reason why, one of the reasons I think, as you're saying, diet is not sustainable, is because that's the exact diet you would do. If you want to create diabetes in the body, right. If you get high, fat is one of the fastest ways a high-fat diet is one of the fastest ways to actually make your body diabetic. So, these people that are just promoting ketogenic diet, like as the life source, the best healthiest diet on the planet, actually all the research is saying the opposite. Like you're saying, it can be good for short term for some of these, chronic health conditions, short periods of time, but not sustainable.

Dr. Thomas Lodi, M.D.:

It's got some really important therapeutic uses like for fastening too. You know, just real quickly is that all nature was fascinating as built into it. No animal in nature eats every day, they might eat one day or two days, and then they run out of food for a week. So now that is intermittent fasting. I want to really correct term. Most people keep saying that if you eat once a day, you're intermittent fasting. That's not intermittent. Fasting is a fast is when you have not eaten for 24 hours. Okay? If you're eating once a day, it means you're eating healthy. If you're eating twice a day, it means you're eating healthy. So what I tell my people is since insulin and glucose or the dynamic between insulin and glucose are very fundamental to pathology, whether it's heart disease, liver, disease, or cancer. Remember we talked about insulin and glucose and cancer. You know, you've got to get you to be healthy. You should have a fasting insulin of three or less fasting, insulin of three or less. Most Americans are 12 to 18. Some go up to 25, right? It's gotta be three or less. So the best way to manage that is to put a minimum of 18 hours between your last meal and your first meal every day. Now that's not intermittent fasting, that's eating healthy. So you stop eating at 6:00 PM. You eat again at noon. Then you eat again at 5:00 PM done at six, and you've done it. You've got all your nutrition, but you have 18 hours where your body is able to clean up because when you're not eating your body's cleaning and your insulin requirements go down. Cause you remember cancer needs insulin to push the glucose in. So all of that, it's very, very, very, very important, but it's not intermittent fasting when you fast every third day or you fast on

Sundays, that's intermittent fasting. It just bothers me that people don't gotten miss understood. Yeah.

Nathan Crane:

So the intermittent fasting you're saying is when you do a fast, every Sunday or every third day or whatever it is versus just eating in a six hour window.

Dr. Thomas Lodi, M.D.:

Right.

Nathan Crane:

You're, just, you're being healthy. You're allowing your body to do what it needs to do to clean itself out. And .

Dr. Thomas Lodi, M.D.:

Otherwise you can say, look, I do intermittent fasting. I stopped eating between breakfast and lunch. And then I stopped eating between lunch and dinner. So I'm eating three meals a day

Nathan Crane:

You know, it's funny about that. You're in Thailand, right? Which is primarily Buddhist country. We were talking beforehand. I used to spend a lot of time at a Buddhist monastery in Escondido. And I dunno if that's how it is there for a lot of the monks at the monasteries specifically where you're at in Thailand, but at this monastery, you used to spend time at learning meditation and learning from the monks and, just being around beautiful, healthy, happy, funny people. They only ate once a day they'd lunch. And that was it. And it wasn't based on some scientific research that it's good for you to only eat once a day. It was like, they knew for however many 100S or 1000S of years, that one of the healthiest ways to be, and also, detached from having, I mean, there's also the philosophical side to it and so forth, but somehow intuitively they knew like, yeah, eat once a day. I haven't been able to do that yet but they certainly were very successful at it.

Dr. Thomas Lodi, M.D.:

Yeah.

Nathan Crane:

I just find that, I find that fascinating, science is great, helps us understand things more clearly. But if you look at our ancestors for 1000s of years, a lot of the wise people they've figured out a lot of this stuff on their own without our modern scientific tools. Right?

Dr. Thomas Lodi, M.D.:

Yeah. And if you're eating food that hasn't been processed, it's still has all of its nutrient for nutrients. It's nutrient dense. And if it's the proper diet for your particular species, which is human, so you have a nutrient dense meal, you've done it. You've taken care of your nutritional needs, which is the purpose of eating. The purpose of eating is not to pleasure the tongue, although that's a nice side of side benefit, but the real goal is to keep your nutrients coming in for energy and for structure, and that that's what we need. So if you can do that once a day and you have all that time, I was up in me and Mar Burma when they had a flood and I was up there helping them. And I was up in the mountains and I went to a monastery way. I had to take a boat for, I mean, this boat for hours. It's amazing. Beautiful, incredible. Anyway, these monks, everybody on the monastery was monks, right? The whole place. So when you, anyway, people over there don't wear shoes. They don't have devices. They're not at all. You know, it's not this century. They eat the food that grows around there and they eat once a day. So I was there examining the whole village, right. To see how everybody's health was. And here I am examining these 70, 80 year old men monks. And they were, had they had the bodies of the 30 year olds.

Nathan Crane:

Wow.

Dr. Thomas Lodi, M.D.:

They were amazing. They had no fat, their bodies were, they were tight, their muscles. You could S you know, they had a definition, they weren't like bulky, but they had definition. Their heart rates were. I mean, it was amazing. And it's cause they eat once a day and they eat. And the other, secret about eating is if you're under 30, you have to stop eating three hours before sleep under 44 hours and 50 and above five hours before sleep. Okay. Because that's the reason for that. And we can do another whole talk on it. The reason for that is because one of the greatest benefits of sleep is autophagic for our body to eat up and get rid of the debris. It won't do that. If it's still absorbing food that has glucose. Cause it doesn't need to. So auto fascia gets turned on by the license on the system, in the cells when there's no more glucose coming in. But if you ate a meal an hour before, you're still absorbing it while you're sleeping, you're not going to get that benefit. Right. So, and the reason there's three, four and five hours is because digestion slows down as you age, the ability to digest, right? And since you should go to bed at the very latest 9:00 PM, you have to start. But if you're 30 and under stop eating at six, if you're 40, stop eating at five 50, stop

eating at four, and that's just, and then 18 hours, great. Four times a year do a two week fast. And that's it. You can't you'll have to be hit by a bus.

Nathan Crane:

So, 50 and older, which is most people who are tuning in here to the symposium, you're saying at least five hours stopped. And that's that's whether you're 60, 78, it doesn't necessarily keep going up. You're 80 years old. You need to stop eight hours before or no.

Dr. Thomas Lodi, M.D.:

It would be. But think about what the monks are doing, the monks eat. It depends on what country they're in. Either 11:00 AM to 12 or 12 to one around there, right? So they're, they all have eight, 10 hours, 12 hours before they, or 10 hours.

Nathan Crane:

So you're just that window of time, you're allowing your body to finish processing the glucose from the food. So now it can start cleaning the debris out while you're sitting.

Dr. Thomas Lodi, M.D.:

And your night will be fantastic. And if you're going to bed with the sun, as the sun sets your eyes close, if you're doing that, which is a natural life, you and that's a whole nother lecture talk and lecture, but you're, you set up a whole system of hormones and your circadian rhythm, and you're in sync with your nature, your bio rhythms. You're just, you become, it's amazing. In fact, it's the most important thing you can do more important than eating, right? And the reason I say that is because if you go to bed early, you will then have something that you don't have when you go to bed late. And that's called willpower going to bed late. You wake up in the morning, you're on your third cup of coffee. You're driving by the donut shop or you're driving by whatever it is that McDonald, whatever it is. And you're going to say, okay, just one. But you woke up, you went to bed early, you woke up, you did your meditation, you did your reading. You did your exercise. You're out the door. There's no way you're going to mess with that beautiful, wonderful feeling. You're going to say no way. I'm not going to do that. So what I always let people know is that the train you get on tomorrow, you get off the train you will be on tomorrow is the one you get on. At the time you go to sleep, you go to sleep at 8:00 PM. You're on the, a train. You go to sleep at 11:00 PM. You're on the F train. And it's only it's because you're not going to get restorative sleep.

Nathan Crane:

Right.

Dr. Thomas Lodi, M.D.:

You're not going to respect your body, right? You're yeah. You're going to get a lot of dreams. So you won't be crazy, but you're not, going to get restorative sleep that you didn't have.

Nathan Crane:

I think sleep that you need, you have a 20% plus a deep sleep at night, which is beyond REM sleep. A lot of people think REM sleep is the most important. It's not the most important. It's that deep restorative sleep.

Dr. Thomas Lodi, M.D.:

Right? Right. Two cycles. There's two cycles before our set point, which is around 1:00 AM. Before that set point, we have 90 minute cycles. The majority of the cycle is restorative. And a little bit of REM after that set point at 1:00 AM or whatever time, it is for that particular person is reversed. The majority is REM and a little bit of restorative sleep. So if you went to bed at 11, you only got maybe a half a cycle or one cycle of good restorative sleep. And you've got a lot of REM. So, and if you don't get REM, you'll go crazy. You'll kill people. You'll be angry. Right. But, so that's what REM is for. REM is to get, it's kind of like steam letting off psychological steam, but the restorative sleep is what you need to stay healthy and young and your immune system and all that. And most people are not getting it ever. I mean, how many people go to bed early? Very rare. Most people go to bed at least 10, 11, 11, 12. So anyway .

Nathan Crane:

Yeah. Well, yeah, we recently just started going to bed earlier here now, especially it's winter here. Well, at the time we're recording this, it's winter. The sun's going down earlier. So we're like, all right, it's time to start going to bed earlier. Now, we're going to bed an hour earlier than we were. And you know, it's kind of hard initially to... for the body to start getting used to that cycle. But once you do, then it's beautiful. You know, listen, I know we could go on for hours. You are such a wealth of knowledge and information and inspiration that we covered. Probably 20 things that we never even touched on uncovering. And I'm grateful for you to just unloading all of these nuggets of wisdom. I know we could do three or four or five different interviews on different subjects. I know I told people tuning in, make sure you're taking notes because you're going to learn a lot. And, I think people really learned a lot. So Dr. Lodi, thank you. It's always a pleasure. I just appreciate you Sharon and doing everything you do.

Dr. Thomas Lodi, M.D.:

You're welcome. My pleasure. Absolutely.

Nathan Crane:

Yep. And I want to thank all of you here for tuning in to the global cancer symposium. Make sure to share this with anyone who needs this information. There's so much wisdom here, and I encourage you to go back and listen to it again. Take notes review because you start doing these things that Dr. Lodi has been talking about. It's going to change your life. Go listen to that interview with Dr. Nathan Goodyear, we go into a lot of depth there, some other really good nuggets of wisdom there and visit an Oasis of healing.com. It's [www.inoasisofhealing.com](http://www.inoasisofhealing.com). You can learn about their center in Arizona. You can learn about the integrative treatments that they offer. You can connect with Dr. Lodi who's over in Thailand, and they have a lot of good resources for you there at the website. So go visit their website and make sure to visit [healthandhealingclub.com](http://healthandhealingclub.com) as well. The online global membership to helping you get and stay healthy again. I'm Nathan Crane. I wish you ultimate health and happiness. Take care.