Introduction and Guest Welcome

Welcome back everybody. I am incredibly honored to have the lovely Dr. Geo Espinosa, here with us from far, far away from where I am in Mexico. He's up in the the northeast, in the New York area.

Is that correct? New York? That's right. Yeah. There you go. That's what I thought. So welcome. Here we are about to have a really incredible conversation about all things prostate cancer, your area of passion and expertise.

So absolutely. Let's do it. Yeah. Thanks. Exactly. You know, you and I were talking before we started recording here, which we should. We should always be recording those conversations, right?

There's so much juiciness there. That's right. I want I want folks to understand you have kicked down some pretty big hurdles to be a nature clinician working in a very standard of care environment.

You are really the ultimate bridge maker, and I'd really love for you to walk people through how you were able to do that. I appreciate that question Nasha, thanks again for having me on this summit.

look, I guess that, for sure there's always an element of luck, right? Right place, right time. But, many have said you create your luck, right?

How Dr. Geo Built His Urology Niche

And so maybe there's a combination of both, but, when I was doing my clinicals in, University of Bridgeport naturopathic medicine, for some reason, maybe that's my calling.

Maybe that's God, maybe that's the universe. I just kept seeing a lot of men, and most men who came to the clinic wanted to see me. And at that time, I had I was resistant to the idea of specializing in this one area of urology.

I mean, why would you do that? You're naturopathic doctor. You treat the person, not the disease. It doesn't make any sense to do that. And I was resistant until one day when I am.

and I lived in a building in New York City, of course. And my neighbor turned out that he's a urologist. And he said, look, come to my office. I'm here in Washington Heights is a big lab, Latino population.

You speak Spanish. They all love natural things. And, you know, maybe you can still you can work here. And I at that time, I needed, like, internship hours and things, so.

Sure. And I started working in urology. This is early 2000s. And I loved it. I absolutely loved it. I loved this is going to sound weird. I love doing prostate exams.

Not weird. I mean, you know, and checking and, you know, prostate and feeling and. Wow. Yeah. And I kind of getting used to what I'm feeling and, you know, and so forth and seeing what's what and feeling nodules, which is, you know, significant to prostate cancer and feeling people who have prostatitis.

And it was just amazing. And then after that, I was I had the great fortune of going into, Columbia University Department of Urology, where Dr. Aaron Katz, would developed the center for Holistic Urology.

There. And, you know, you how that happened was that it's so happened that I was here I'm here in New York. Dr. Aaron Katz had interest in holistic urology, and he was running some trials that he needed help with.

I said, well, I'm your guy and I this is all I do. I do urology. So then I did urology with him and that was like my

fellowship, unofficial kind of fellowship where all in particularly all in, in what studies look like.

And, when we are looking at supplements to, to study for a disease or a condition and all things, related to conventional regular medical urology, amazing.

What is it that they do? How do I do? How can I do it better? Where can I do it better? How can I complement, where do you really need medical treatment and so forth?

I mean, and that was five years. And then at NYU again, it turns out that my boss, Dr. Herbert Landau, who is a tremendous guy, he's done, he was one of the, he was a resident when they discovered the nerve sparing technique and a prostatectomy with Patrick Walsh at Hopkins.

So here we are. We I'm talking to him, and I'm like, this is like the former foremost surgeon in the world. And prostate cancer. And it's not going to happen. But anyway, let me have a talk with him.

Turns out he's super open minded to what I brought to the table. The fact that I treat prostate. So Titus and most urologists don't want to treat prostatitis.

The fact that he appreciated lifestyle, approaches and diet and nutrition. And okay, after I do my prostatectomy, how do we keep them? Well, interested in this and, and I guess the rest is history.

I've been there for 15 years, you know, NYU, urology, just to brag a little, but it's number two in the country in terms of, in the US news rankings, in, in urology.

and look, I have no idea what I have to do with that. but the fact that I'm working with these, you know, extraordinary urologists, and urologic oncologists who I've been part of the team as a naturopathic doctor now for 14 years, where they even saved the term naturopathic medicine correctly.

Yeah. That's something. Yeah, yeah. No, we have a naturopathic doctor. You could talk to them about saw Palmetto and diet and things like that. It has been it's just through and I've learned and I learned so much from them approaches and techniques and things.

So we are in the we're in the leading edge of anything related to things like prostate cancer. So yeah. you know, I guess that, some of it is luck that I just happened to be in New York.

Some of it is that there was a hustle mentality, of course, when I kept knocking. And you keep knocking like, no, no, no, wait, some of you actually need me.

and let me tell you why. Oh, you don't have time now. I'll come back. And it was this kind of a protest. Just a kind of New York thing or a personal thing, personality thing that, got me to where I am now.

So thank you for asking that question. I love that because that's just persistence pays off, right? Time and place. But but really, this is just your passion.

I mean, there is no accidents here of how you show up in this place. And I just want to really reiterate, the field of men's health in general. Yeah, prostate health in particular, in my opinion, seems to be very underserved.

And and and I'm very excited that you have, you know, heard the calling to this and are supporting so many men on their own health care journey. And even more interesting for the listeners, like typically people who are drawn to come and see somebody like myself or Geo naturopathic doctors in general, 80% of those patients are women.

And so it's really amazing that you found a niche that's underserved, that really needs that. All that we have to offer as naturopathic doctors and that your colleagues in the realm of standard of care appreciate you.

And you them. And so that I'm just what a cool story. I didn't even know the extent it I knew you would been where

you were for quite a while, but I did not even know how that transpired.

So thank you for it. Thank you. Thank you for asking. Yeah. Yeah. And so one of the things is you and I, you know, we've been at this for a while. And so, some, a few things have changed over the years in my practice of what to think about a prostate cancer, how to approach it, what would you say kind of walk us through kind of what's been the general consensus of how to best treat, how to best screen for, prostate cancer in general.

Prostate Cancer Screening and PSA Testing

And then what are some of the most exciting standard of care treatments that you see happening now or on the horizon, maybe kind of give us, you know, maybe the last 20 years or so of prostate cancer or prostate health in general and how it's been approached and where it may be going.

All right. Great question. Thank you for that. so I, I break prostate cancer into three parts. We have the pre diagnostic phase. Right. So what do I do I don't want a biopsy that's invasive.

And so can I avoid that. And if and if so how or if I need a biopsy. What's the best approach. So that I don't have to keep biopsy all the time. That's a pre diagnostic phase.

Then there's the post diagnostic. There's two parts to that. One is the the person is diagnosed with low risk disease called Gleason grade one which which means that yeah you can have a Gleason score of six with Gleason scores a a method of staging for prostate cancer.

and you don't need medical treatment. So then what do you do? And then there's the, there's the second part to that number two, which is you do need treatment.

What's the best treatment and how do you how do we keep you well, after you get treated. So there's a reduced risk of recurrence. The third phase is you're ready.

You're diagnosed with advanced prostate cancer. That's either a Gleason 8 or 9 or some evidence shows that, the cancer is outside of the prostate. And in many of those circumstances, you actually, you will undergo androgen deprivation therapy.

So now we're dealing with two things. We're dealing with the side effects of the address deprivation therapy. We'll call it ADT. And we're dealing with the cancer itself.

So those are the three parts. Pre diagnostic is very interesting because what we learned within the last 20 years is first of all let me say this because PSA gets a bad rap.

Yeah PSA actually reduced the risk of advanced prostate cancer in the late 18 and 1980s, early 1990s by, up to 35%. Meaning what? Meaning that most men who came into a, a urologic office with prostate cancer already had advanced prostate cancer because there was no biomarker any way of determining that they had it.

you know, at an earlier phase, PSA helped eliminate that to the point where, so we're talking 1990, 40% of men who came in already had advanced prostate cancer year 2000.

20 years later, only 4% of men that came in had advanced prostate cancer. That's a significant difference. So PSA it's a decent biomarker. Perfect. What we learned from that experience, however, and certainly within the last 30 years is that, PSA because of PSA, there was overtreatment, overdiagnosis over treatment of prostate cancer.

So yeah, we things got a lot better. But then that is sort of the history of cancer in general is my understanding. We have something that, you know, helps you, diagnose that earlier and there's an upswing.

Everybody's excited is that we're now we're over treating then it come you know we bring it back down. So PSA a decent biomarker a very good biomarker for the prostate and a decent biomarker for prostate cancer if used

correctly.

good. Point. Ever since for the last 20 years or so now we have other things we learn to appreciate what's called PSA density a lot more that, that can help you be more specific to prostate cancer.

In other words, PSA densities is easy. Calculation is, PSA value, total PSA value over the size of the prostate. and that gives you a score. Typically the cutoff is about 0.15.

If it's higher, that 0.15 is more suggestive to prostate cancer. If it's lower than 0.15, it's more suggestive for it to be for some benign reasons. Maybe the PSA is high because the prostate is large.

Amazing. And that's it. And that's a very. And the reason I mentioned PSA density because it's also an inexpensive test. It costs nothing other than you need the size of the prostate from, from an MRI likely.

alt guided ultrasounds are not as doesn't give you such an accurate, volume in size, like, like an MRI. And really quick, before you jump into that, I would love this is a really good clarification, as there's even various types of MRI that are specialized for prostate cancer.

Can you just do a quick segway to that? Because that's technology. How much time do we have? Gosh. Oh, maybe too much of a can. Of how much time do we have to listen?

the here's the deal. We can talk about that, but I'm assuming the viewers are going to be, you know, millions from all over the world. The fact of the matter is that most people are not going to have access to an MRI and certainly not have access to a sophisticated MRI, like A3T MRI, which is the one that's currently this year, the best one, the one that, it's the most valuable one for prostate cancer is three t, but most people are not going to have access because it is a very expensive machine.

So we still have to figure out what to do in that population. And that could we could probably figure that out or have that discussion. in another episode somewhere down the line.

But the so the bottom line is, there. so after PSA and PSA density, again, very inexpensive. then we have other things. We have other tests, we have, urine tests that's more sensitive to prostate cancer.

The goal is to for the test and the biomarker to be more sensitive to prostate cancer and not just sensitive, to just, or not just specific to the prostate.

And so these are things and typically these tests are better than just PSA. So this test is called the exosome detect test. So urine test urine eight.

And it tests for exosomes that are more specific to prostate cancer. After a certain point around 7.5 or so higher than that, more suggestive that there is lower than that, 91% chance that there is no prostate cancer that we care to find.

Leads me to my next point. The goal is not to assess if a person has prostate cancer. The goal is to assess if the person has the type A prostate cancer that can eventually kill them, where we could do something early enough to treat them.

Very important because we don't care to find Gleason six prostate cancer. On my podcast, I had one of the renowned, world renowned experts from the University of Chicago, Scott Egger from the University of Chicago, that he has been very vocal on, not even calling Gleason six cancer.

He says we can call it something else because almost no one dies from prostate cancer with a Gleason six. What that really means is that I don't want to find Gleason six and kind of have people go through biopsies.

So as I'm telling you, this information, nausea, what I'm telling you is this is the process to find only prostate cancer

that we care to find. Yeah. Okay.

So the the the urine test exosome does it. There's the 4k score which is a blood test. That's also very good. There are many. There's the five score now. There's just so many.

Which one be what we're all battling for the best test now is the the battle of the, of the pre process of the prostate cancer tests. But here's what's an interesting moment.

Take a moment here and reflect on this. Yeah I would say that 99.9% of men who have come to me with a Gleason score over six with a concerning, more assertive, more aggressive cancer type have not been offered anything beyond a pap but me, excuse me, beyond a PSA.

And so I just think that's very interesting that I personally, like you, run all these other tests and take a deeper dive to really understand what we're really dealing with, including some other surrogate testing such as prolactin scores and, you know, you know, galectin threes and whatnot.

But what I think is so interesting is it's not offered these other metrics. Can you maybe explain why that is? Well, I think what if correct me if I'm wrong, what you're asking is what are the microenvironment, Michael.

Biomarkers versus the prostate cancer specific biomarkers. Yeah honey I mean look you're asking is the the training is to find prostate cancer. And this is why we have this is why I'm so busy with my practice.

Because no one else is looking at the microenvironment. And this is exactly what I do. You call it the terrain of course. same language. Right. So who's looking at the terrain?

Who's looking at these terrain biomarkers? Very few are. And so then I am right. It's just not part of the methodology. This is what were you saying? you know, bringing bridges together.

this is exactly that. We are exactly doing that. I'm treating the person holistically, making sure that the microenvironment is hostile to prostate cancer.

So then after they get diagnosed and then treat it, then they have a lesser likelihood of a recurrence. so if we can move so now we can move on to the post diagnostic.

Right. And in that scenario you're already diagnosed. now what if you're an active surveillance because you got diagnosed with a Gleason six. This is the perfect opportunity for you to be proactive and take matters into your own hands.

Advanced Testing and Microenvironment Markers

Now, I did, record a podcast episode, titled why I Love Gleason six Prostate Cancer. And I look for that, put. That in the notes. And the reason for that is because men don't come on, men who are listening to this, and even women who have men that they love, they're not interested in being healthier.

They can talk that. They can see that interested in performing well up, up to the point where we are diagnosed with a potentially life threatening scenario.

And I was like, oh, now I'm ready to do whatever I need to do. So as I had this conversation with doctor, I said, I hear you and I understand that the C word can provoke anxiety, I get it, but man, there's no group of men more, you know, more enthusiastic and passionate to start any lifestyle program and be compliant with it like a guy who's diagnosed with a Gleason six.

Right. Interesting. So then we have the guy who's okay higher than Gleason six diagnosed, treated the recurrence rate in people who are treated with radiation and or prostatectomy is up to 50% within ten years.

Why? I didn't really say that. It's that high. That's a big that high. Oh yeah. Okay. So the recurrence means that. So recurrence does not mean a like that is there's a there's a life threatening scenario.

It means that the PSA rising up significantly after after prostate cancer treatment that was initiated for curative intent. Got it. So now there's a there's a PSA rising.

So then now what. Right. So what you want to do after prostate cancer treatment is lower the risk of that PSA rising, which we know we do with what we do, naturopathic and lifestyle approaches that we'll talk about in a second.

then is the person diagnosed with advanced prostate cancer? this is Gleason nine or higher. This is, you know, outside of the capsule. This is already bone metastases.

This is your PSA. You know, over a hundred, sometimes a thousand, sometimes 7000 PSA, believe it or not. and that person already has metastatic disease also on androgen deprivation therapy which now we have two risk.

We have the risk of depleting testosterone, which, can induce metabolic syndrome, cardiovascular problems. weight gain problems and other problems, cognition, all kinds of quality of life issues.

And then we have the cancer itself. So now we're dealing with both, and and that's that. And, and that's that, I love that and that's a lot. And first, I really love you brought it right into those categories because it's not just one lump sum bucket of just prostate cancer.

There's various flavors that you alluded to and various approaches, all of which really would be benefit it to a more holistic approach, which you very much offer and are very expert in.

So let's talk about this sort of controversial elephant in the living room. Oh, and so as. It's not an elephant in your living room was a German shepherd, I believe it's.

you know, something something in my living room is a couple of, rescue dogs that are just it. This is their show, not ours today. So thank you for that. Apologies.

Step aside, step aside. Keeping people, paying attention here. That's right. It's interesting because in my practice, and I'm going to be really frank about this, first of all, this androgen deprivation therapy never made sense to me, just personally.

Right. And then what I've seen of the side effects of that, the quality of life in the management of cared for who had that therapy has given me even more of a of a start.

And I understand that there's not many options. And so that's one of the only options that is offered from a standard of care perspective. But what also didn't make sense to me is just kind of the basic biochemistry of it all, in that I understand.

And I'm going to really oversimplify this so you can poke holes in it if I'm really wrong here. But it's like when we have testosterone, when when everything's in balance, more in homeostasis.

Here's our teeter totter just right, perfectly balanced when we smush down one end, whatever. So if you're a woman with breast cancer and you're blocking estrogen, you have it.

Should you do this as well? It's not just, you know, unique to the prostate cancer world, but when you deprive, you know, androgen deprivation therapy, push down and block, you know, or suppress that, that testosterone, what in it happens just by nature is estrogen goes up.

And what I've personally found in my practice because I test and like you, we look at a lot of metrics beyond just a good old PSA. We're looking at the terrain.

My experience has been that men with prostate cancer, actually what's leading to their prostate cancer is estrogen dominance, not testosterone dominance.

And so I may be oversimplifying that, but that's what I see. And so to me, to then give a medication that seems to provoke that even more just doesn't make sense.

And and my only patients I've personally ever had not do well, with prostate cancer, even high, you know, super high Gleason scores are those who did start on androgen deprivation.

They are the harder ones to turn around once they've gone down that road or gone down that road for a while and become resistant, even more resistant.

Active Surveillance and Post-Treatment Recurrence

So it's a lot I'm going to let you dive in and chew on whatever part of that feels appropriate to you, because I recognize this is controversial, but I would really like your take on it.

All right. So the premise that you mentioned on the fact that there is an imbalance in ratio between testosterone and estrogen, which I believe in general in men's health.

The problem with, the hormonal elements that can be problematic as it relates to health is this imbalance ratio between testosterone and estrogen. Under normal circumstances, let's even say outside of prostate cancer, that ratio should be somewhere between 15 to 20 to one, testosterone to estradiol.

So men need estrogen, right? Very important hormone in men. But the ratio it's what we're shooting for. And to keep that ratio optimal okay. Let's start there. Right okay.

So then we can move on. Actually here's what we'll do. let's talk let's have a brief discussion on testosterone and prostate cancer. And then we'll talk about ADT because I think it's it's going to come all together.

That's great. Thank you. This whole started in 1940 with Charles Huggins, a Nobel Prize winner from the University of Chicago, who wrong end of it. Study dogs primarily as it relates to testosterone and prostate cancer, and saw that if we inject dogs with testosterone and who had prostate cancer, the prostate cancer got worse.

so there was a but in terms of human studies, everything we know, it's 75 years old and it's from Charles Huggins, who out of all the human studies, there was only one case that showed progression with testosterone and high levels of testosterone in prostate cancer.

So was based on one case, which is we would never do that these days. Right. We need a bigger studies. Yeah. So then, people like Abraham Morgan taller, in early 2000s kept this is.

That makes sense. and so he, he dug deep and saw that this was the case with Charles Huggins. He's the one that, let us all know that this is exactly what happened.

One case. And this is why we think that at the time, testosterone is, you know, the gas of the fire. Again, pre diagnostic, diagnostic and advanced cases of prostate cancer pre diagnostic does high testosterone or men on testosterone therapy causes prostate cancer.

The answer is no. So there is no gas to the fire there. In fact when you look at the literature closely it shows that men with low testosterone have higher risk of advanced prostate cancer.

That's actually the correlation that exists. So yes. Correct. Right. So not only is it not the cause it could potentially be the problem. Yeah. Yeah okay.

That's pre diagnostic post diagnostic. So you have a man on active surveillance right. Gleason six hypo gonadal.

Are they a candidate for testosterone.

The the answer is yes they are. We do it clinically all the time. I say we I do it naturally because, in my world, I like to increase testosterone naturally.

but in some other cases, they do testosterone replacement therapy either way. yes. Men on on Gleason six can be on, can can benefit from higher testosterone levels.

Does it do anything to the cancer. Not that we know of is not therapeutic to prostate cancer. but it doesn't, make matters worse. It doesn't make it more. But these are studies.

and so then they can enjoy the things of testosterone, the quality of life, longevity, cardiovascular, event or cardiovascular health and etc. men post.

Now, the next step is men treated for prostate cancer who, who had of the other prostatectomy or TRT or brachytherapy or anything seeds can do.

ADT, Testosterone, and Hormone Therapy Debate

Are they a candidate. Some studies again looked at showed yep. No difference between men on TRT and men in placebo. After these two circumstances okay advanced prostate cancer now they're on ADT.

They are taking the therapeutic approach in that case is to actually chemically castrate them. Right. Okay. In that scenario there is a study being conducted right now by Sam Den Meade from the, Johns Hopkins on what's called bipolar androgen therapy.

And the theory goes like this. It's not testosterone that may be involved in the progression of prostate cancer. It is the androgen receptors which has signaling powers that then signal to the prostate to kind of make matters worse.

So the androgen receptors naturally when you when the when a man's body is either low in testosterone or. Depleted of testosterone because of the therapy, the body naturally wants more, the prostate wants more testosterone.

So it's going to start making more androgen receptors naturally. And it's going to come, you know, and come out in the, you know, the outside of the prostate, wherever the cells.

And so that there's more is looking for testosterone. Okay. So there's no testosterone is the body thinks is only a matter of because there's not enough receptors.

Let me make more receptors. well yeah. Yeah. So the ADT can potentially. Well what do we know from ADT. This is not a controversial statement at all. We know that it becomes resistant that it stops working within two years.

And then now the PSA goes up anyway and it progresses which is what we what the first thing I'm trying to do with patients that come to me with advanced prostate cancer is to prevent them from getting castrate resistant prostate cancer.

So first thing yeah, that's what I'm trying to do. Beautiful. So then now a bipolar androgen deprivation therapy being studied there saying this wait a minute.

So if we know that what if we deplete the body of testosterone, more, more receptors come out. So then why not give the body testosterone? And then now there's less receptors, and now maybe the ADT can actually work in terms of getting rid of the cancer.

Interesting. And so that's what they're studying. And so that's still on it's still being investigated okay. So what do we do. First of all, there are very few practitioners currently who are interested.

And I'm going to say treat because that's what people have access to. Again, there are natural ways to increase testosterone and that's a different conversation.

But look out for that. But let's just say with TRT there are very few practitioners. In the first case, before diagnosis, let's say they have an increased risk of prostate family history or after prostate cancer diagnosis that are willing to do TRT, not because there's no evidence against it, it's just because there's a lot of downside and no upside, particularly if you're in the insurance.

Insurance, if you take insurance. So this is a regular visit where the paid doesn't pay anything, and now you potentially increase the risk of getting a lawsuit if the cancer gets worse.

Again, if the cancer gets worse after diagnosis, that's probably the case that that would be the case anyway, even without, to. Control the evolution of the process.

Of the cancer itself. That said, there are practitioners who are willing to do so, and even in advanced cases. So I have, I will have, the, this recording I have, Helen Burney from the University of Indiana, who is a male reproduction expert, and she is a firecracker.

And she in all these cases, she does prescribe testosterone in the right patient in advance cases. she says it's a shared decision making between me, their oncologist, and yes, there's no research to support this, but these patients that clearly say, look, my quality of life is important.

I'm willing to sign the dotted line. And she has people with advanced prostate cancer on testosterone and so far she has not reported any problems that would be different than anybody else with advanced prostate cancer. So it is now the end all it's going to.

So now there's a traverse what's called the traverse trial. they're following, 5000 men, placebo control on TRT. And there's one published research on 2023 New England Journal of Medicine that shows the following.

It shows that TRT does not increase the risk of cardiovascular events in men who already have cardiovascular disease relative to compared to placebo. That's all we know. Now, why is that important?

Because in 2010, there was this hoopla that TRT can increase the risk of cardiovascular events. And so they just proved that this is not the case. Again, in my world this just increased testosterone.

Naturally they that from the traverse trial we're going to learn a lot as it relates to prostate cancer within time. Like more definitively everything I've said there's evidence to support it with the exception of advanced prostate cancer and TRT increasing testosterone.

In that scenario, there is no evidence to support that it's being studied at Hopkins, and some practitioners are saying shared decision making. Let's put them on TRT.

I don't see a problem and that's where we're at. Interesting. Well, thank you for the clarification because there's a lot of Wild West out there, a lot of yeah, yeah.

Clarification. And so you mentioned that you use more of a natural approach to stimulate endogenous production of testosterone. Could you give us maybe a few examples or even a single case example of what that might look like.

And let's, let's look at somebody in that Gleason six zone. And that's, that's I think that's a really interesting kind of that middle road that's a little easier to talk more in generalities versus those more advanced, you know, nonresponsive cases.

So a Gleason six person with, with low, testosterone levels, I treat them like any person with a low testosterone level. So there is no difference. And the approach is essentially.

Four parts. And the four parts is, in some descending order, maybe not, but because it's all important and you don't, this is not a buffet. You don't get to choose. Really. You just know.

You know, this is all really important. and it works synergistically is sleep, exercise, diet and and and and nutraceuticals. Okay. Okay. I initially Nisha and I know that many of my, our colleagues.

Maybe you as well be like looking for metals and things like that. There's only so much that we can do in one visit that they're gonna. You know, I just don't see the guy.

There's like, yeah, let me do the urine test and the blood test and it's a librarian. Did it, did that that, pay thousands of dollars and say, I'm just going to assume, you know, most, you know, my experience, most men have, you know, either moderate to high some metal gear with cadmium, mercury because of many things or fish that they eat or whatever.

so I just look at their blood work, and I it's comprehensive. Right. So here's what I'm trying to accomplish. It's not total testosterone that we care about.

We care about free testosterone. Period. End of story. I say that because some people are still looking at only total testosterone and saying, well, total testosterone is, you know, low, what's low, you know, between 300 and 1000.

So three 50s low, 350 total. But if their free testosterone is 2% free, yeah. That's, that's that's great. And they, they may not even have symptoms. So it's all about free testosterone and period.

End of story. Yes. If testosterone is below 200 is impossible to have either free. Yes. But if if it's around 300 which is the low end 350, you can have enough free and. Yeah.

All right. So it's not a matter what's the magic total number. I'm not looking at that. I'm looking at what's the free. And I'm also looking at the ratio between testosterone and estrogen.

Hallelujah. Not many. People. Though. So what do you do. So, we look at sleep, and I look go into their sleep. They're trying to improve their sleep and their sleep quality.

So you start the production. And the secretion of of testosterone happens during REM sleep. No REM, no testosterone. That's it. Period. End of story. So we need REM. Yes.

And we need about 20 like 10 to 20% of your total sleep to be REM. That's roughly could be, you know, 90 minutes or so. Interesting exercise. Here's the deal with exercise.

It's very simple to explain. Maybe not to do, but this is the deal. While I exercise, you know it has to be prescriptive. So if you're an endurance athlete, your testosterone is going to go down because that's very stressful to the body and the body.

It's it's it has to conserve itself. So it's not going to make the testosterone because they have to do other things. Yeah. Because all the stress of the body.

So endurance athletes would struggle with that. Same thing with that executive who is a CEO of a company and also does CrossFit. That is way too much for the body.

The cortisol level is too high and cortisol interferes with testosterone production of it. So these are the these are actually my toughest patients because pulling back is very difficult for them.

so these are my toughest patients. exercise is, weight training bigger muscles. So we're talking about lower extremities back. You could do all the, arm curls you want.

Natural Ways to Support Testosterone

Maybe you develop some nice biceps, but that's not going to increase testosterone. Got it a lot. So then walk around with really skinny little legs, but really developed upper bodies there.

Probably you can't forget leg day, brother. You can't forget leg day. That's you. Don't forget leg day. So important. Though. So that's that now somewhere it goes like this.

Somewhere the prescription is like this in terms of duration, reps, blah blah blah blah blah blah. About six repetitions, six times, two minute rest. What exercises, whatever you want from the lower leg.

So be, you know, squats or deadlifts or machines or whatever. But the weight needs to be. So if it's too little weight doesn't stimulate that. So it's enough weight so that the sixth repetition, you still have maybe two more in you, but you stop at six.

It's subjective, two minute rest. So back stuff for back stuff for legs that does it now all so that what causes an increase in testosterone. What we need it's a no.

This is not a testosterone, summit. So I could, you know, going a little deeper, but I'll say this. You also need to stimulate and engineer receptors.

Right. So you have good tests done. You can have free testosterone, but if there's not a lot of receptors that work well that are sensitive to the sensation, you're not going to get the benefits.

Weightlifting in general can stimulate androgen receptors. So that the prescription that I just said in terms of six times six, you know, with two minute rest that increases total testosterone, weightlifting and exercise in general, if it's not too much, can increase androgen receptors and androgen receptor sensitivity both.

That's why exercise is so important. All right. Well, a couple things you're saying here makes me think about when I'm always talking about is like I call it the three S's sugar, sex and stress.

So that, you know, the the court, the insulin, big driver. So even a bad couple, bad night's sleep, your insulin growth factor shoots way up and prostate cancer is very sensitive to insulin and insulin growth factor.

the cortisol piece. I love that you expressed so much about that. And again, this is not to be speaking in generalizations, but I found that it's more challenging to get my the men in my practice to think about, you know, self-care and stress, resilience training and stress, you know, reduction than men more so than the women that I've worked with.

So I think that that's something that really I think it's going to be delivered better from you versus from me. So I love that you're talking about that.

The overtraining piece is massive. The, like, I'm curious about you using tools like, you know, maybe wearable devices like HRP to really monitor their REM and their sleep patterns or cortisol patterns, because I also think that kind of built in bio informatics would be really helpful for a lot of people in general, and men in particular, and then even down to like a maybe a continuous glucose monitor, which can show some of those responses, even down to understand the need to rein it in in their workouts.

I can't even tell you. Like, I love that you actually spoke about the over zealous sort of weekend, you know, corporate weekend warrior, issue. We've actually had a lot of studies showing that that's actually far more dangerous than those just sitting on a couch all the time.

I mean, they're both terrible, but we tend to think that if you're a weekend warrior, that you've got it all figured out, and that's not good either. So I think that you're talking about that Goldilocks sweet zone of all of the things.

Right. And so. Yeah, it sure. Is where you as a naturopath shines on like anybody else, because you really understand the complexity of supporting the training, supporting that, the whole person with this, I think that's huge.

And so with that, it's, I mean, strikes me that this would be working in all three categories. Your prevention of prostate cancer. So those with the higher risk or just, you know, knowing that 1 in 2 of us will face cancer in our lifetime, those in the, early like that low like pretty much pre-cancerous Gleason environment or just a rising PSA that you're just kind of watchful waiting.

You don't have to just watch. You can do something. And then moving into the Gleason six zone, which you said is like the sweetest spot ever, because you can really turn the ship around the harbor.

And even just bringing quality of life and improving sensitivity to whatever therapies are being used to treat the advanced cancer, all of these things you just talked about hit all of those categories beautifully.

Thank you. Yeah, well. I love it. I really love it. And so if you had like kind of wrapping this up is one of the things I really want folks to know is what Dr. Geo has done for us today is just give us a teaser.

This man knows more about this topic than anybody I've met. And so one of the things I'm super excited about, and I want our listeners to know about you, is if you were excited about, I mean, I have like 12 different points from this talk that I learned in this conversation today.

If you want to do the deep dive, Dr. Geo is bringing us much more the fall of 24. You are curating an amazing Men's Summit and Prostate Cancer Summit.

Can you give us a little teaser about that and tell folks how they can follow you? Learn more and learn about all of these brilliant offerings you bring to the table that just aren't available anywhere else.

Well, thank you again for the opportunity. Look at with all these years that I've been doing what I do, you definitely get to look outside of the box, look outside the box with with with a scientific lens.

That's. So how does the body work from a holistic lens, the interrelationship of all systems or bodily systems, systems. And I think that's was, lacking a bit in medicine and medicine, though I think that my medical colleagues are brilliant and they do an amazing job with prostatectomy.

They're removing prostates and the people are oftentimes back to normal within only weeks at a time, after their surgery. It's remarkable what they do.

but again, we need to treat the terrain or the microenvironment and to make that, to reduce the risk of recurrence. So, so thank you for that. and I it's, it's just a pleasure to do what I do.

I guess you're alluding to something that, I think that, that we're working on currently. So, just like you with this Summit, with this Cancer Summit, I'm curating currently the Prostate Cancer Summit, which will be out later this year.

Prostate Cancer Summit and Where to Follow Dr. Geo

And, I'm curating a list of extraordinary, speakers and experts in the area where, all the different elements of prostate cancer, and so I'm super excited about it because I, I'm still learning, the beauty Oh Geo, Prostate Cancer Man.

Come on, man, don't you get bored. I am learning all the times, and things are evolving rapidly in this field. So yes, I'm not an oncologist or an integrate of oncologist.

I'm an integrative urologic oncology naturopathy oncologist, and pretty much all I do is prostate cancer. So, I'm able to we're able to put this Summit together and, you know, hit it out of the park.

So, thanks for, for, building the stage for me to mention that. And then lastly. Needed. Thank you. So its DrGeo.com and "The Dr. Geo Podcast." There again, I get the best of the best on on the on these topics and

overall men's health but certainly a lot on prostate cancer.

You know including you know it's it's can somebody be on active surveillance if they have a Gleason seven prostate cancer and things like that. erectile dysfunction and erectile dysfunction after surgery, those kinds of things.

And DrGeo.com is the hub where you can find everything is, So DrGeo.com, thank you so much. I love it. And, you know, for those of you who want another taste while they're waiting for your summit to come out, and while they're digging around your book, "Thrive, Don't Only Survive." is excellent.

An excellent, excellent, primer and resource for all of those interested in this topic. So, Dr. Geo, such a pleasure. I am so I'm so proud to be affiliated with someone like you who really, really has jumped right in with both feet and built, built bridges, curates really amazing information, constantly hungry for more knowledge.

You don't you don't give up, my friend, and keep doing all the beautiful things you're doing. And thank you for being with us. it's such a pleasure. Thank you for inviting me.

And as always, a pleasure to be on any stage with you. Nasha.