Discover Fitness as an Active Prostate Defense Transcript

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Introduction and Guest Background

Hello, everyone. Welcome once again to the Prostate cancer Summit. I am your host, Doctor Geo Espinosa. And it's my pleasure to introduce you to Doctor Ralph Esposito.

Ralph is a licensed, natural, perfect decision. Focuses on optimizing healthspan and lifespan through nutrition, exercise, sleep, and mental emotional health.

Also, he loves working around precision supplementation. He completed his training at NYU urology with with me at at NYU, and also did a half decade tenure ship mentorship under Doctor Peter Attia.

Doctor Esposito believes in personalized approach to preventive medicine by using evidence based tactics to teach people how to perform and feel their best, while reducing the risk of chronic disease.

I have to say, Ralph is also, an expert in the area of mental health, and that's what we have him. Ralph, thanks for being on video. Thank you so much.

It's it's nice to get after it again with you. Yeah, I didn't mention that. I wasn't right before we sort of recorded. I won't mention the NYU thing, and I just kept reading your bio, and it just kind of led into it just because, you know, I think that only because, Ralph, I think you've done incredibly well after you've worked with me and honestly, you took it off.

It was like a great you know, we're in the Olympics, right? It was a great relay. I gave you the baton. I'm still in the race. But here's the baton. You move forward with your career and keep doing the things you do, and you're doing amazing work with what you've done, what you've done with, with your work with Doctor Peter RTA and with with what you're doing now.

So, why don't we start with this? What are you doing now? Let the audience know what you're doing now, what you're up to. And, what kind of patients? You see these days?

Yeah. So when I. When I look and see all the things I've influenced my career in the past, I take a part or a piece of each one and incorporate how I work with patients today.

So, in my private practice, I do work with patients. And the approach is how do we essentially assess your risk to make sure that we cover all the bases, to have an understanding of what are the things that could potentially take your life in the future, and what are the things that could take away your quality of life throughout your next 4 to 5 decades, hopefully longer?

And in order to do that, you really need to look and understand what are the things that actually take people's lives. Prostate cancer being one of them for men.

And when you reverse engineer it, you can then understand how do you attack these things in a way to give people the best opportunity to be successful in their health and their lifespan?

So that is the approach to, supplementation, nutrition, exercise, specialized labs, all of the above to make sure we get people on the right track so they can feel them at their best.

That's awesome.

Genetics and Prostate Cancer Risk

And you're licensed. Interestingly, you live in the East Coast in New York, but your license in a variety of places. Where are you licensed as a natural traffic doctor?

And, Connecticut and also in California. That's where a lot of my patients, are. So I made that possible to them. And then, in New York as a licensed acupuncturist.

Love it. Love it. Well, I'm very happy for the work you're doing. I would say I've even proud of the work you're doing. And like I said, you are on your own feet doing amazing things and very happy for you, Ralph.

Genetics and prostate cancer. Wow. This is something that's, a bit confusing for the audience. I think there's more information on that. There's more tools to learn, you know, who's at risk for prostate cancer.

And when you get it, then there's other genetic tools to say, okay, how will this cancer behave? So if you like, can we break this down a little bit? Tell us, give us an overview on what really what's genetics as it relates to prostate cancer and what are some of the tools available.

Interestingly, genetics plays a big part in prostate cancer. One of the first clues that we have for that is family history. Now, these are all things that we can do to test the genetics.

And we'll get into all of that. But your family history really is the book that gives us the most information. It's what clinicians have been using for centuries, right?

Even before conventional medicine became a thing. Understanding somebody's background allows you to understand where they're going. So when we look at, prostate cancer, we know that it is one of the most aggressive cancers.

Excuse me. It's one of the cancers that take one of the cancers that men die from. But most men will die with it rather than dying from prostate cancer.

And that's really important to understand. So truly differentiate like who are the men that will die from prostate cancer rather than those who will die with prostate cancer?

Genetics becomes a big part of that. And that's when we step into things like germ germline versus somatic mutations. So if we take ourselves back to baseline genetics, there's germline mutations.

And these are germline cells, DNA that are coming from, reproductive cells. So these are things like how much? What? Your parents, what you, what your parents gave you suffering line.

Mutations are okay. Go ahead. Exactly right. So germline is what you got from mom and dad, and then somatic is what actually happens after. So these are the bodily cells.

So an analogy would be skin cancer. That is a usually a somatic mutation from sun exposure. And then we have skin cells that become cancerous whereas prostate cancer can be related to germline mutations but also can be due to somatic mutations.

And we'll get more into that as we go through. Great. And so if a patient wants to learn right. So here I am I am 52 years old. I do have and this is, a kind of case study.

I do have a father that had prostate cancer. I'm concerned about that. What are the tests? How do I test for? To learn if I have, these, these germline mutations that my parents might have given off to me?

Yeah. So there's there's two ways to do it. Now, you can actually do these germline mutate or germline testing. There's a few ways you can do actually see a geneticist and get these genes tested or run.

And you can actually identify are these things that are, present in you with the mutations that would actually

increase your risk for prostate cancer.

So you can do things like historically there's some tests of like 23 me which were able to give us some, information on that. Germline mutations. Things have changed frequently or recently.

So, there's, there's multiple different labs that allow you to do this. But if you go to a geneticist, you can do things like testing for Broca, which is very common.

Or I should say popular, not necessarily very common, which is a very important thing to understand. And there's there's various other genes that we can test for, something that is associated with Lynch Lynch syndrome.

So these are things like MSH and LH, I mean, it's MSH six. You don't really need to remember those specific terms, but these are certain genes that you can test for that will allow you to understand that if you have mutations in these genes, your risk of prostate cancer does go up.

Now, it doesn't necessarily whether you'll get an aggressive prostate cancer or not. Really depends on the gene. And what's important to understand is these things these genes are not deterministic.

So it's a that's an incredibly point, important point to take home with your patients. And also when, if you get this testing yourself is just because you have the mutation or if you have a variation in a gene, let's say you have a broncho two mutation, similar with breast cancer, that doesn't necessarily mean you'll get breast cancer, and it doesn't necessarily mean that you will have or get prostate cancer.

So there's other things that we can do to allow these mutations to, increase their susceptibility or increase your susceptibility to actually getting prostate cancer or not.

But what we do know is that individuals that do have some of these mutations is specifically Brca2, which is a brocco, which is one of the more, well known.

There's about like a 4 to 7 fold increase of getting prostate cancer. If you have this mutation now, that doesn't necessarily mean that you will. It just means that's something you have to be on top of to get an idea of, could I be, more aggressive in my screening or approach if this were to come along, even lifestyle or even lifestyle?

Right. Exactly. Isn't it amazing? Like, one of the things I tell patients oftentimes is, look, you're not you're not enslaved by your genes or your germline genes or things that your parents gave you.

You can either you can keep those genes off the ones that are cancer causing off by whatever, you know, endocrine disruptors in the environment, probably limiting these or whatever exercise, whatever.

So it, I think that, germline genetic testing and I'd love to know your thoughts is, you know, it it it kind of puts that extra gear in for you to take more charge of, of yourself, your health, and do all the things that we are recommending, right, with the lifestyle things.

Yeah. And usually it's not something that I would say everybody must do this. It is something that one should consider. And a few things that I put into place is, again, we are treating people.

We don't treat tests. So that is the approach. I remember one of our, one of my mentors in school would say, nobody really got better from, a lab test.

They got better from the doctor and the interaction with the patient that that's what got them better. And and that's how I act. That's. I'm a patient's health fiduciary.

It's you have a you have a finance guy that you go to to, you know, monitor your farm and your retirement. And we're here to monitor your health, retirement.

So, so in order to do that, I really need to understand, are are you at risk or not? So I look at things like family history, I look at the age of the individuals in your family history.

If they did have prostate cancer, did they die from prostate cancer? And also considering your demographics, whether you're European, Caucasian, African American, Asian, all these things come into play and really allow us understand, should you undergo this testing or not having a first degree relative with prostate cancer, and especially if they, were diagnosed at an early age or they died from prostate cancer, is a little bit of a red flag to me, where I start saying, okay, this is something that we need to start looking into to understand.

Does this give us better precision to assess this person's risk so we can anticipate something and maybe be a little bit more active in their surveillance?

With their PSA and etc.? And as they age and with their lifestyle, all of the above.

Somatic Testing and Tumor Profiling

That's beautiful. And so what's the deal with. So it sounds like somatic, or germline testing is something that we could do, prior to prior diagnosis, perhaps because, you know, we want to know if we are at risk after a diagnosis actually might be useful.

Right. So if there's a broncho to mutation, perhaps, it could tell you a little bit, perhaps this particular type of cancer could be more aggressive then, if you don't have a bracket to.

I think there's some Asian with that. How about somatic testing? How does that work? And what would one do if they want to be so medically tested? I don't know, I'm just making up. I'm tissue based testing or essentially testing the DNA of or RNA or the molecular, pathways of these prostate cancer tissue.

So really important to differentiate between the two. You don't do somatic testing unless you have actual tissue to test. So you must either have a biopsy, a prostate biopsy, which is not always the most comfortable.

And hopefully you're not in that situation, but obviously situations occur where that happens. Or you can test the whole prostate tissue if it's removed, do prostatectomy.

And essentially what you're doing is you're sequencing the DNA of that prostate tissue. What is the whole prostate are there to remove the whole prostate or a prostate biopsy or maybe even a, prostate cancer that possibly metastasize?

You can even do testing on that. And you assess the expression of various genes in these tissues to risk stratify. And most of the time, if it's a Gleason three three, which we would not really consider could be an aggressive prostate cancer.

Most of the times these these DNA tests or these genetic tests come out and say, yeah, this is not likely to be an aggressive prostate cancer. And that's really what we're trying to find out, right?

Because as as you and I both know, most men will die with prostate cancer. And. Well, we want to find out is who are those that will die from prostate cancer.

And this this really does allow us to do that. Yep. I and I love, you know, the three main players, in this field and at this point, they are the three main players is, the decipher test, the uncle type DX and the prop, Polaris test.

Those are the main three players, and it's, it's so important to be able the way I see it. And I'm wondering, do you see it the same way? I want to collect as much data of my patients. Right.

I want to make sure that can we overdo it or can we get too much information? Possibly. But so what I want to know as much of their disease that they have as possible so that we can take better action.

Be better prepared, know exactly how this their cancer will behave, and take action accordingly. So is that pretty much, do you go in the same kind of frame of mind?

You manage what you can measure? Yeah, it's how I think about it. And if we can measure these things, then we can help manage them. But if you are playing with a deck of cards that you don't know what your next draw is going to be, then it's going to be much harder to help that person navigate their health for the next five to 10 to 20 years.

So absolutely. And although there are a lot of clinicians who will say, you know, perhaps a Gleason three or even a three, three or a 3 or 4 may not be necessary to do the decipher uncle type of progress.

I do think that it does provide us some information because it also provides a peace of mind to the patient. And and you and I and a lot of other men know that prostate cancer is as much as a physical, battle as it is a mental battle, I think.

Yeah, very good point. And even if they're even, you know, you raised a really good point, because even if the genetics show something unfavorable, I think what make men more anxious is the unknown more than the known.

So even if the, you know, the test is showing that there's more it's possibly more aggressive. The cancer they have. Well, at least I know that. And at least I can take action, whether it's lifestyle, natural convention, whatever it is, I could take better action.

So, you know, it's a that's a very, good point. And the important thing to understand is that I'm, I don't prescribe, medication or I'm not a oncologist or a urologist that would intervene with androgen deprivation therapy or radiation therapy like that is not my role.

My role is to be an advocate for the patient, to help them understand what is actually going on here. And could we do other things to enhance or, integrate or complement some of the therapies that they might be seeking with their urologist or their oncologist?

And the important thing to understand is that these things are prognostic tools. You know, they they don't necessarily predict. They help us have a better understanding of what's the likelihood of this being an aggressive cancer or not.

Can I go on active surveillance? Are there androgen receptor, mutations that we're noticing that would actually allow this to be more sensitive to ADT or not?

And if it is, do we need to combine it with radiation therapy to, allow the prostate cancer cells to be more susceptible to therapy? Or do we just need a prostatectomy.

And and maybe sometimes that is the best option because the situations call for for that. And it allows the person or the, the man to feel more comfortable after the prostatectomy, which is exactly what we want them to do.

And they can get back to their normal life. And then we get on to business as usual. Yeah. Thank you for that. Ralph, you know, lifestyle medicine, there's been papers on it even recently on lifestyle medicine and prostate cancer.

Even so, those that, have a predisposition, a genetic predisposition to advanced prostate cancer, it shows that certain lifestyle practices can help reduce the risk of diagnosis and mortality from prostate cancer.

This is published in major journals. Recently. I've written about it on my newsletter, Doctor Gatcombe and so forth. For number one is how does that work?

How can it almost sounds like lifestyle medicine can be the best medicine? It could be $1 trillion drug, right? If it were, if it were bottled. And how does it how can it manipulate genes or the microenvironment to reduce the risk of mortality?

If one is diagnosed with with with such a disease? When I think of lifestyle medicine, we're talking about nutrition and I'm talking about exercise, we're talking about sleep, we're talking about stress management. Right.

So we should be really specific. And when we talk about lifestyle interventions or lifestyle prevention and essentially what these things are doing, as you mentioned, they're creating a micro environment that is hostile to the prostate cancer.

That's exactly what we want to do. We don't want to give the prostate cancer an environment where it feels comfortable, and its ability to grow and metastasize.

And in order to do that, our body has its own anti-cancer, immune system, things like NK cells, which could be going after these, these types of malignant or un, or foreign cancer cells.

And in order to do that, it needs a healthy immune system and needs a healthy lifestyle. And the first place that I look at is metabolic syndrome or insulin resistance.

And many people will look at me and when I tell them, we really need to get your blood sugar under control, we need to really work on your insulin levels or activity, whether that's with lifestyle or with exercise.

Lifestyle Medicine and Cancer Prevention

And the response is, but I don't have diabetes or I don't have blood sugar issues. And I say that we see, but we have some markers like fasting insulin that is often not checked by clinicians.

And I'll look at that and I'll say, hey, if passing insulin is trending on the high side, or I have an amount of CGM, glucose monitor, and I'll see that their average blood glucose, although on a blood test is normal during the week, is elevated.

And what essentially this is doing, it's it's stimulating insulin. It's causing insulin sensitivity. And that actually creates inflammation and localized tissue, which prevents the body from doing the things it needs to do.

From an immune system perspective, the other aspect of it is just exercise these things. We don't know exactly what exercise is doing, but we know that in common with doing exercise and, nutrition, they're having epigenetic impact on the tissue and the tissues around the prostate cancer.

So they're turning on and off genes, things like P10 or p53, which are p53 like the protector of the human genome or the genome integrity, or that, the Akt pathway or all these different pathways that can be turned on or off, through nutrition and exercise that allows a suppression of some of these cells to express this genetic, behavior.

I'm sorry, the cancer behavior. Sure. Men exercise, talk about one lifestyle practice that I think, I think recently I had a conversation with other colleagues and they asked me, you know, which one of these things that you recommend are most important?

And I said, well, that's a difficult thing. The line that I always use is just like, it's like asking me which one of my three kids I love the most. I don't know.

I think I like to believe I love them all the same sometimes. Maybe one more, depending on the. You know, you're going to be a father soon. You're going to realize that I don't care what you say.

You're not going to love them or the same, you know, every day. So in any event, but I say, you know, gun in my head, you know, which is most important, man exercise.

Because even first of all, when you exercise, let's say you eat great. Well, if you don't have good circulation, these great nutrients are not going to get to right to the areas that where you want them to the prostate or wherever else.

The other thing is that it gives you a little bit more leeway, right? So your metabolism completely changes to exercise. Right? We, Thomas Frieden, for the summer and he talk a lot about the metabolism of cancer.

And it seems like I'll get there again. Exercise is one of the I just, you know, one of the main, contributors to, making a really hostile microenvironment.

So I appreciate you saying what you said and particularly emphasizing on, on exercise and what it does to these chemical pathways. Well, in some I think in summary, and correct me wherever I'm wrong there.

So there's two types of genetics. There's there's germline, which is, brought to you by your, given to you by your parents. It's okay to mention companies if you want, like you mentioned, 23 and me, one of the companies that I, that I, uses in Veet, the saliva test.

Are there other companies? I think there's one called color. Color? Any other companies that you're aware of that, does this kind of germline testing?

Yes. There's also, Data diagnostic solutions lab. They do, they have an Illumina array that does, germline testing, much more advanced than, what I've seen on the market, like direct to consumer.

This is fraught through clinicians. It uses, certain software, opus 23, which essentially takes the full sequence and allows you to put it into certain algorithm aggregate algorithms to understand these snips and assess somebody's risk, which can look at things like MSH and Broca and, other things too, which are unrelated, that are important to clinicians like apiary and etc.

and if you can and if you can get an understanding of those, you can then help the patient feel more comfortable in their steps moving forward. And what I really like about this, their software, and understanding it is you can find out what in either animal studies or also in in vitro studies and if possible, human studies of what pathways is impacting and what nutrients can I use to either agonize or antagonize this pathway.

So, you know, let's take for example, you know, we can look at pathways like, cell cycle inhibitors or pi, K3, CB or Parp inhibitors. Right. And we know that there's drugs that work on these things.

And that's actually a really interesting way that I like working is what what drug works on this pathway or what drugs are used for this type of cancer or this type of, germline mutation that might make someone more susceptible to that cancer?

And is there something else in nature, whether it's a nutrient or a vitamin or a nutraceutical or, sometimes even bacteria like probiotics that actually might function on this pathway.

Now, that doesn't necessarily mean it's going to be as strong or have the same pharmacokinetics as a ADT or, a Lupron. Right. That's that's not well, that's not what we want.

But if you can understand the pathway that these drugs are working and you know, the success and outcome from those drugs, then if we do combine nutrition and we do combined exercise, what is that extra little advantage that's going to help us move this pathway in the right direction.

And that's when I look at things, through these, these programs to get an understanding of what what is this person make up and can I antagonize or organize a certain pathway to push it in the right direction?

It's not full proof, but it certainly does help people with their outcomes. And that's how we learn how to help the actual individual. That's awesome.

And as it relates to, somatic testing, we already talked about, you need tissue guides that there is no other way you can have finesse. You need the actual tissue of the tumor itself to be analyzed by one of these three companies to tell you this story of how this cancer may behave.

So, the three companies is, or the three tests are decipher, uncle type G, uncle type, uncle type test and Polaris. Are there any others that you're aware of?

No. Typically, decipher is the one that I'm most familiar with and see most used a lot of research coming out on that. So, but those are the three that I know are the big players.

And, and truthfully, anybody can get these and it's, it's important for you, if you did have or you are having a prostate biopsy or you, that's something you want to talk to your urologist about, it should be available.

It is not something where you have to go to a specific location, a specific hospital. These are readily available. They're, FDA approved. You can certainly use these things if you speak to a urologist.

So don't be shy to ask if you feel like it's a good fit for you. That's right. I, that's part of being a patient advocate, right? You want to empower a patient.

You want to be able to. Not every urology is going to order it for many reasons that you know too much to talk about. So and you want to make sure that you that you ask for it.

Closing Thoughts and Resources

I like the fact that you mentioned the cipher. I was just at the American Urological Conference, and the all the genetic testing was really a decipher kind of talk, and they put a lot of effort in their research.

I've had a few of those guys, including the developer of the test, Eli DaVinci, only on my podcast. And, my God, these guys, they've done a lot of good work around, somatic testing for prostate cancer.

So that that's a good one. Doctor Ralph Esposito, first of all, thank you so much for being on is late here in the East Coast for you and I, so I thank you so much for being on any final words.

And where can people find you? Final words. I want men who are experiencing prostate cancer to know that this is absolutely something that they can take control over.

And there's a lot more interventions out there than just the typical watch and wait. Right? I know you and I have discussed the difference between watch and wait or wait and watch an active surveillance, right?

You don't just watch it. We want to be actively surveilling it and making sure we're doing everything we can to, prevent progression. So there are options.

There's not just one thing to do. So PSA monitoring that is not the only thing you can do. There's a lot of other things you can do. So certainly from a nutraceutical exercise perspective.

And then I can be found that Doctor Ralph Zillow.com, it's the same thing off of all social media, Instagram, Twitter, where I will be discussing a lot of things around spam, when it comes to a release to men and men's health.

Doctor Ralph, as the CTO, thank you so much, Ralph. I really appreciate you being here today and sharing your knowledge and expertise with us. I thank you.

All right, everyone, thank you for joining me once again. This other, excellent presentation and interview with Doctor Ralph Esposito. I hope to see you the next one.

We're going to keep rolling here. Are we going to keep rolling? And and we have, a tremendous summit here for you that where you're going to be more empowered and know what are your next steps if you have concerns about prostate cancer.

So I appreciate you being here much love, and I'll see you next time.