Unlocking Peak Performance: The Functional Medicine Edge for Athletes Transcript

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Introduction and Guest Background

I'm like a duck. I'm pretty kind of showing the surface under water. It's nonstop. And that's very much relevant with all of our patients, athletes, especially we're always in our head, right?

The mental component is so often overlooked. And so we utilize different techniques and strategy to work on Fox. Welcome to Healthy Choices with your host, Ray Solano from Austin, Texas.

Now, here's your host, Ray Solano. Hi, this is Ray Solano, pharmacist and owner of Prescription, Dispensing, and Glandips, and welcome to another edition of Healthy Choices Doctor Talks, a long-standing podcast that we have been able to interview some of the most influential practitioners in the world of integrative medicine, this new era of longevity medicine.

So we have many different disciplines and people's different opinions of what they're working on to really understand how to make people healthier again.

Daniel, nice to meet you today. And let me pronounce your last name. Is it chill? Is your last name pronounced chilly? Keeley. Dr. Daniel Keeley is a board certified functional medicine practitioner and has been known to helping patients that fall through the cracks with traditional lab testing.

And well, you know, with a background of conventional and integrative care, Dr. Chilly identifies the root cause of chronic symptoms, which is such a foundational start for most people.

Unfortunately, many people just don't even get to that point. They just give up. So, doctor, give us a little bit of an understanding of what makes your approach just different from what we have as so many different options that are out there.

So my story is a little bit unique in the sense of many like my patients. I struggled with GI issues early on when I was attending Northwestern and that progressed later into life until I realized that pursuing functional medicine really explains the underlying causes of any symptoms upstream.

And so I was also a former professional athlete, played at a very high level. of which was tremendously stressful in many capacities. So it's just like stress compiled the stress, which many of us can relate to is really the elephant in the room, which then drives a lot of this kind of representation of gut issues, dysbiosis, further kind of exacerbated my overall health.

But over time, I was able to kind of take charge of my own health and reverse everything that I was struggling with, which is what we do in clinic very effectively.

So it's been a fun roller coaster.

Athlete Recovery and Lab Testing

Well, you join a lot of others that have excelled and you definitely are, like you said, an athlete. And sometimes people just don't take care of their bodies.

They just think that if they exercise, everything will just fall into line. And unfortunately, that's the worst thing to do, isn't it? And I guess you spend a lot of time with blood work and labs.

And it's amazing what you find when you do the basics and just peel back the onion on these lab results, correct? Yes. So I'm very big into lab testing, especially there's so much information to be discerned just from what we've turned as our advanced longevity wellness panel.

But in general, just looking at blood chemistry, the blood never lies. I think our mutual colleague, Jim, written his book, which elegantly kind of uncovers that ideology.

But needless to say is that when we assess for lab markers, what's normal is often what I consider to be sick care versus optimal, which is the epitome of healthcare.

And so when looking at lab ranges, just how they're configured, you take two standard deviations away from both top and bottom end. And then you kind of toss that out and now you have a standardized mean, which isn't necessarily always relevant to the specific patient, especially if it's a top performing athlete.

And so we look at it from a very different lens. My goal is to optimize instead of find the average or pursue normal. Well, you know, that's, it's always the case that when people over train, right.

They become more susceptible to viruses and they actually get sicker, but they continue to train. And they think the most, the dreaded word is, you know, might want to take a couple of days off and don't train.

Right. And when they, when you tell them you're not going to train, that's when they get really upset. Right. Yeah, the premise, what I say all the time is if you want to train hard, you've got to recover twice as hard.

And we'll measure and assess different markers in terms of recovery. And there's so much that can be discerned just again, from a simple lab analysis, but often enough, not only with indicative of athletes, but we have one function here in the US predominantly, and it's just the gas.

We always just go. So it's very difficult for us to unwind because our culture is predicated upon success through accumulation of wealth and material and such where it's just go, go, go.

You got to work more to earn more to enjoy more. And that's very much not in congruent with our evolutionary biology. We were designed to run away from a tiger, eat, rest, rinse, repeat.

So our athletes are kind of exacerbate that in the sense of Um, we're always trying to burn the candle on both ends and I'm very much a product of that as a former athlete myself.

And so we see very much within our athletic population intestinal permeability or what's globally known as leaky gut is very, very prevalent, which has many sort of adverse consequences throughout the organ systems.

But needless to say, our goal is to intervene and say, okay, here, here are some specific methodologies that we can integrate to focus on recovery. equal or more so than just the training component.

So that's probably one of the most overlooked pieces in terms of recovery and assessing blood chemistry to discern where someone at is in that time frame or they need to kind of press on that or tap on the brakes, if you will, more so than just consistently gas.

Well, one of the things that we look at for different labs is we see their electrolytes off. We see their white blood pout. And we also see their gut markers also off-lung.

Maybe you can tell us specifically what markers in labs that you like to go look for athletes that may be overtraining to realize that they're really on the borderline of being very ill.

Yeah. So you referenced, you know, a CBC with differential white blood cell count. I like optimally between five and eight. Often when I see that lower, there's some sort of a chronic infection, anything above more of an acute infection.

Looking at a neutrophil should be around 60%. Lymphocytes should be around 30%. Monocytes around seven to eight percent marker of dysbiosis or inflammation.

The former two neutrophils looking more at kind of representation of bacterial infection, lymphocytes more viral component. And then eosinophils at or below three indicative of allergies or parasitic infection.

And then basal fills one or below marker of. toxicity and so looking just at a simple cbc with differential which the differential component again often overlooked you can find such very very actionable insight into where someone is in their immune profile because again when you're training hard there is going to be a lot of immune activity to help rebuild the damage that's being done inflammation is going to be high oxidative stress is going to be high so that's why we need to prioritize recovering the various tools within But those are some of the numbers and markers that we assess within a CBC.

Their mineral composition, so you mentioned electrolytes, looking at sodium and potassium, magnesium, not only serum, but RBC mag, so above a 6, as close to kind of a 7 as possible, making sure that the body is a little bit more alkaline rather than this acidic in catabolic state.

So same thing, we can assess adrenal function with something as simple as assessing sodium and potassium markers. For sodium, if I'm recalling correctly, I like numbers between 135 and 40, potassium between 4 to 4.5.

Overtraining, Gut Health, and Immune Markers

Even blood sugar management, usually less problematic with athletes, but if I see fasting glucose Beyond 85, we're already starting to see pre-diabetic risk factors raise 6% for every point above 85 and above 90, inferring a 9% increase for every point above there still, which again, Very, very indicative of endothelial dysfunction, cardiovascular risk factor.

So you see a lot of these marathon runners with hardened plaque in their arteries and enlarged hearts. And we weren't meant to do these very intense movements for too long.

Again, it's like run away from a tiger, rest, repeat. And that's kind of the premise. But looking at some of those labs, those are very easily just low threshold markers that we can start to paint a profile where someone's kind of recoverability score looks like.

You know, I'm looking at the top of your bookshelf. Your top of your bookshelf says chill, right? It's also on my license plate. Oh, is that right? That's perfect.

Yeah, it's, it's interesting because that's part of how my last name is spelled. And listen, again, being an athlete, I, and of one, I speak to this is I'm like a duck.

I'm pretty kind of showing the surface under water. It's nonstop. And that's very much relevant with all of our patients, athletes, especially we're always in our head.

Right. The mental component is so often overlooked. And so we utilize different techniques and strategy to work on box breathing, diaphragmatic breathing, to help induce more of that parasympathetic response that rest and digest so that the body can recover.

Cause otherwise we're stuck in this cortisol resistance profile, which then impacts hormones. We can only heal at the speed of our nervous system and our hormones, unfortunately, are first that are hijacked.

One, because we're not optimizing. So in terms of healing, how I look at it with our patients, first, we work on circulation, perfusion, make sure that the nutrients can be delivered throughout the periphery.

Second is blood sugar management, which we already alluded to. Third and fourth, which go hand in hand to me, are gut and immune. Layer five is hormones, but if you fix layers one through four, you're optimizing hormones.

But again, going back to this, this healing dispute of our nervous system, sleep is a superpower. And most often is we are not prioritizing sleep. I asked our patients all the time, what time do you start an alarm clock?

And they're like, oh, you know, five, six AM. No, no, no. I said alarm clock for what time you go to bed. Right. So to prioritize recovery, to prioritize repair.

So going back to that component of chill, we need to invite more chill. We've just become society that is again, constantly pressing on the gas until we run out.

You know, we were meant to rest when the sun goes down, right? and we're supposed to arise when the sun comes up. But unfortunately, we rest at five hours after the sun goes down and we wake up when the sun comes up.

So it's no wonder why the body can't repair. So that's, you know, it's unfortunately, you have to educate everybody, correct? Yeah. I always say to my patients, nothing good happens after sunset.

That's right. That's right. We were designed to live in conjunction with the cycle of the sun and the moon. And healthy sleep starts with blue light exposure first thing in the morning when the sun's ionizing rays are far less.

So the damaging rays are throughout the course of the middle of the day. You still want to be in the sun. I think the sun is very, very healing, therapeutic and critical.

I mean, vitamin D is hormone D, which The only essential vitamin that we make, which is very, very necessary, but the component of staying awake, the advent of the light allowed us to be more productive, this kind of industrial boom, but it's been at the consequence of our health, which has been deteriorating ever since.

And so with blue light exposure at night, which kind of kills off retinal cells, unfortunately, I as well, we just have kind of gone backwards in many respects in terms of not living congruent with our biology.

And so when I suggest that nothing good happens after sunset, that's when my aging patients or even some of my athletes that have kids are like, well, Daniel, that's my time for me to unwind.

And I was like, okay, well, That's a problem because the goal is to get in bed and start earlier. Again, waking up with the sun, going to sleep with the sun.

And if you look at timing of food, which was so elegantly demonstrated in the circadian code book, when lab mice ate healthy into the evening versus unhealthy earlier in the afternoon, 100% of the mice that ate healthy at night all gained weight.

So in the context of our evolutionary biology, from a content of performance, both within the late population and athletes especially, when we're eating really matters.

And if we're staying up late at night when our brains, which are so metabolically active, are just yearning for glucose, we tend to make bad habits. Right.

And then that trickles down to the next day. And now all of a sudden, now we have this metabolic syndrome picture of disease. But in terms of athletes, this is just even especially more important.

And so I've created this kind of foundation five principle where you got to eat right, sleep right, move right, talk right, poop right. And from there, you're going to feel right and you're going to perform right.

But if any of those pillars are getting knocked out, that's when we start conferring some of these symptoms and the body will physically scream out and have manifestations of pain when you have two of those pillars knocked out.

Because number one, most of us is not prioritizing sleep. And the second is usually just our nutrition, which is a

consequence of our modern kind of agricultural processes.

is just rife with obviously all the herbicides, chemicals, toxins, which are stored in our fat. But needless to say, we can do better. We are doing better with our patients and typically our athletes see benefits much faster because they are optimizing my foundational five principles.

You mentioned when the brain has a lot of activity, it craves glucose. And that craving glucose is in the daytime or in the evening? So what's interesting is we are more insulin sensitive in the morning and as melatonin increases at night, that has kind of this inverse to insulin profile.

Sleep, Circadian Rhythm, and Nutrition

But yet where and where are we eating a lot of our carbohydrates? Well, more often at night because we're snacking, because we're trying to stay up, because we're burning the candle, because we're trying to get work done.

Or again, the component of us staying up is just our brain being driven to feed itself instead of being able to go to bed. So the brain says, feed me, I'm hungry because you're trying to stay awake and I need more nutrients.

So what do we grab for is usually some sort of crap food, which crap implying completely refined in process. It's more of this kind of fast, simple sugar hit that also has a emotional tie in to the brain and hit certain opioid receptors, which now creates this habitual cycle of eating late at night, constantly feeding at night.

And then. because insulin is more resistant into the evening or lower, then confers, unfortunately, a lot of this fat storage cycle. As a society, we're upside down.

There's no question about it, right? You got to have some fun to be socially active, but it is scary that all the restaurants and all the feed, they're open in the evening and they're closed in the morning, in the afternoon.

So it's really difficult. to be able to be functioning, right? I guess you just have to have discipline as an athlete, realize that you're in training and to be able to resist those temptations as opposed to just, well, I'm training, I can eat anything I want.

The difference between a professional athlete and someone who's more kind of just recreational, you couldn't have said it any better. It's the discipline, right?

It's how they show up every single day because motivation is fleeting, but discipline creates a habit. And there has to be a purpose. So we created a spend philosophy, how to spend your best life.

And that second tier for me is purpose. And until you define purpose or your meaning for existence, often enough, I find that most people are just existing rather than thriving.

And so athletes have identified that purpose, whether it's their sport to reach a certain accolade or level or trophy or team bond within the athletic population, they have determined.

very, very effectively. The reason why they wake up and just put in these massive hours of training on a day in, day out basis to achieve that specific outcome.

And so you couldn't have said any better. It's the discipline that's the driver. Now, your practice, tell me, just walk me through when somebody becomes a patient of your practice, what are the steps that you go through to get them?

prime to be the best that he can be. Sure. So we have three different pillars that we focus on here. One is kind of just general health and wellness, which will leverage a lot of testing, which actually I'll speak to in a moment here.

The second is rehab and recovery. So we have a lot of athletes that come in broken. But that lead very quickly repaired through the use of cellular medicine, just as peptides that we leverage within all of our patients, but primarily with our athletes, we find that return to sport is often accelerated by twofold.

I mean, it's like people that have these crazy injuries that I'm seeing more and more at a younger level now. For example, a lot of our soccer players that are coming in with these stress fractures and just athletes across the board, when I'm doing their hormone testing, I'm seeing the testosterone levels are half.

of what my level was at their age. And so this is now creating a very higher risk profile for injury. So we're utilizing peptides very quickly to help restore function, get them back to playing quicker.

And then the third component of sports performance just in general in athletes come in healthy. So I created two programs. One is our road to recovery.

which is the kind of the broken athlete that comes in for repair and then the road to longevity to maintain that new bill of health. And so we'll do a physical component, which is a structural balance assessment to look at any sort of dysfunction, strength imbalance, left, right, top, down, front, back.

So we'll discern very, very quickly. I've never seen an athlete in 10 years and came to us looking perfect. Unfortunately, U. S. strength training isn't always a backbone within most of these athletic clubs.

So beyond that, we'll do a lot of the blood testing that we kind of touched on earlier. We'll do what I created, this advanced longevity wellness panel, which is more than 120 different markers.

where we go very deep to assess as we touched on immune function on different hormones and hormones are a family. So if one off is everything's going to be off, but certainly if you're immunocompromised, then your hormones are not going to function optimally either.

And with our athletes, particularly it's So many of them train, but if you don't have your hormones on profile, it's like you're trying to drive a car with the wrong kind of gas in it or no gas at all.

You're not going to go anywhere. So it's a huge disadvantage. So within the road to longevity program, we'll start with advanced blood chemistry. I like doing genetic testing because it allows us to practice personalized medicine.

I'll see kind of where there are holes in someone's biology to be able to kind of plug those holes often enough from a nutrition or nutraceutical profile.

And then this has been my passion for almost the last 10 years now, especially because of my story is the gut microbiome. So we go very deep with microbial testing.

to assess kind of what the diversity looks like, what kind of level of inflammation there is in the gut, because we're seeing more and more athletes that are coming in not only with these stress fractures, but immunocompromised.

And it's not only a product of their training, but I see is because of the diversity of their species, which confers the most potent immune modulating, compromisation here is often enough not at the right ratios, both in terms of diversity and richness and diversity.

And in terms of pathogenic species as well, it's just the balance of their ecosystem and terrain is unfortunately off. And if your microbiome is off, if your immune function is off, and again, as I said, we could only heal at the speed of our nervous system, which is so necessary within performance metrics, we have to optimize the GI.

So those are kind of the three different parameters that we look at very, very thorough to create a precision-based approach to performance. What about, you know, we work very closely with Jim LaValle on developing the metabolic elite LPT tablets, the BPC157 LPTs, and also the synapsin LPTs that help with the brain function and the hand-eye coordination.

Have you used those in your patients in practice? So, funny enough, I've been using BPC157. probably about 10 years ago when it would say not for human consumption on the label.

Okay. But we've seen the studies and research coming out of Russia and Israel, I mean, for decades now.

Practice Approach and Peptide Therapies

And it's no reason why, you know, why to ban some of these substances as deemed as performance enhancing molecules, right? So in terms of when I mentioned the peptides, when someone comes in with pain, or you know, fractures, any sort of rehabilitation component, that's a staple.

BPC157, usually TA1, TB500, different thymic peptides to help support the inflammatory cascade via the immune system. So that's our kind of minimum standard playbook.

And then we'll leverage some other ones as the healing process But usually, I have a kind of plan where what happens in 0 to 7 days, 7 to 21 days, 21 plus days as we layer on different peptides to accelerate recovery.

But to your question, that's absolutely foundational. In 10 years, I've never seen one negative consequence. We're exactly the same way. You know, we developed these chewables that are replacement of injections.

They synapse in the same way as instead of a nasal spray, the nasal spray works good for acute injuries, especially for traumatic brain injuries, concussions.

brain fog, and then the viraxel, which is EGCG in high concentration because so many of these athletes have underlying viruses that something natural occurs.

And then moducare, the plant sterols are very powerful for antiviral as well. So the combination of all these are quite transformational for these patients to be the best they can be.

in our closing moments, maybe you can give us your contact information so we can make sure we put this on our website. Yeah, absolutely. And I'm eager to learn more about your troubles because well, in terms of injuries somewhere in the body, right, we'll use the injectable.

So it's going to be a lot more specific to the site of trauma and healing, but for a systemic effect capsules very effectively as well, as you may reference some of these plant sterols and just in general, optimizing and nutrition program.

And that's leveraging the, the nutrigenomic part, looking at someone's genes. We can be very specific with what someone should be mindful of. Uh, specifically in terms of cellular pathways or certain wheels that are up or down regulated.

But when you reference viral component, you nailed, that's like a bullseye. I mean, I can't tell you how countless patients over the course of a decade that come in with this immunocompromised profile.

And I see lymphocytes just. completely off, most certainly a viral component. But the interesting part is if you look how we've evolved, we've evolved, you know, to be exposed to virus and bacteria and parasite and fungus.

Those are kind of my four horsemen, but now as we're living in this kind of chemical world, it's about like 3 billion chemicals every year in the food and the water and the air.

Our bodies can't keep up. And so while our immune system can fight that very effectively, when you layer in some of these other foreign invaders plus heavy metals, which can feed some of these pathogenic species, you have a perfect storm.

And within our athletes, because they're training so hard, the hardest part is to help them press on that gas pedal to

say, okay, you know, we have to get the right nutrients on board.

Maybe we have to moderate training for the time being so that we can push harder and resume to sport even stronger. That's a great point. I think we're on the sinning page and you can check out our chewable product line.

The LPT's Lipid Particle Technology is a special exclusive products that we develop that get lymphatic absorption in a solid state. Check out our website pdlabsrx.com or lavalperformance.com.

And people realize this is a whole new generation of being able to get a high level absorption of these key nutrients. So it's a great partnership. We'd like to work with you and we'll send patients to you, especially the athletes, and we know where to get a hold of you.

What is your website information as well? Yeah, so we're at TBDfit.com. I know we want to have you on our podcast to go over some of the unique products that you guys sell to enhance again for repair and recovery that I'm more than glad to leverage in practice.

We're always trying to stay on the cutting edge of where science and medicine is evolving. Jim is a brilliant colleague of ours as well and a mentor of mine, but yeah, tbdfit.com where you can find us.

We're located in Elk Grove Village, Illinois, right outside of Chicago and opening up another clinic also in Miami. But we work with patients, both in person and virtually, and we love athletes because I myself have pedigree of athletics within myself and my staff here.

Contact Information and Closing Remarks

So we do very, very well with athletes, but above that is also just serving as mentors for some of these young athletes and helping them directionally understand just the importance of kind of that foundation five that we touched on previously, because that stacks up later in life, right?

The skill sets that we develop early on can definitely play advantageous as we move on to our careers later in life. Well, great. Well, as we as we close up, this is another edition of healthy choices podcast to a doctor talks as we finish up here with Daniel.

Just a great talk today of just having athletes. Be super athletes by just taking care of their bodies. Um, and check out our website, pdlabsrx.com. And for more information on how to contact you and Daniel, give us your website one more time for all people on our podcast.

Sure. So it's www.tbd like total body diagnostics, tbdfit.com. Sure. And sweet. That's great. Well, we'll look forward to getting on your pond, Kenneth.

Again, this is a great farm. Dr. Talks has got a great library and we've got a tremendous listing of past podcasts you can check out as well. We have a great afternoon and Fourth of July is coming up here, so enjoy yourself.

Thank you so much, Ray. I genuinely appreciate your time. You and your staff are brilliant. I genuinely look forward to continuing this conversation very soon.

All right. Take care. Thanks again. Thank you for listening to Healthy Choices podcast on Dr. Talks, Apple Podcasts, and YouTube. Leave us a review and like us on socials to stay up to date with our upcoming shows and guests.