**Dr Mike T Nelson:** [00:00:00] Hey there, welcome back to the podcast. I'm your host, Dr. Mike T. Nelson. On this podcast, we talk about all things to increase performance, muscle, improve body composition, do all of it without destroying your health within a flexible framework. And today we've got my good buddy and co author on the new, actually grabbing my copy here, Triphasic Training 2 book, Coach Kyle Dietz from University of Minnesota.

This is an all new book. I did a little preview of this two episodes ago. So we'll link to that one. Also 14 high performance methods to unlock elite athletic development. And I was excited to get cow on the podcast here. And we talk all about some of the things in the triphasic training to book, which is all new material.

Everything from lateral sling [00:01:00] method using RPR. How to set up a periodized programs. What Cal realized he was doing wrong for periodized programs and probably only getting results with 20 percent of his athletes compared to. the new version that he uses, which we'll talk all about that, the pros and cons of Olympic lifting and why in general, Cal hasn't used them for well over, over a decade now, and a whole bunch more stuff.

Also this was originally slated as episode 300, but we had to delay the recording a little bit, but I wanted to give a shout out to everyone for listening. Huge. Thanks. Thank you so much for listening to the podcast. We've had at least one show out every week for going on over five years now, which is pretty wild.

So thank you so much for listening and all of your support. Really [00:02:00] appreciate it. And speaking of support and sponsors this week we've got some ketone esters from my friends over at Tecton. If you're looking to get into a state of ketosis without. Having to do a ketogenic diet, you can do it by using ketone esters.

The downside is most ketone esters taste really bad, not just bad, really bad. These are actually pretty darn good. I really enjoy them and each can has 10 grams of their ketone ester, which is different than some of the other esters on the market, it's a BHB molecule, which is the ketone. Bonded to glycerol.

So this allows it to get through the digestion and doesn't taste incredibly nasty either. And check them out. I am a full disclosure. I'm a scientific advisor to them and an ambassador. So we have a link for that down below. Use the code Dr. Mike. to save some money at checkout, [00:03:00] and they are also in the process of redoing the website.

So hopefully sometime next year, they'll have a brand new website with a bunch more information too. So make sure to look for that. And speaking of other beverages, if you want to add more electrolytes to your water, which I've been doing on a daily basis now for Probably coming up on over three years or longer.

Might even be four years. My favorite is LMNT. Element. I've been using those guys for quite some time now, and the big blinding flash of the obvious I had was Hey, if you're eating mostly whole foods, you probably not getting enough electrolytes and you're actually probably not getting enough sodium. And once I started adding more to the diets of myself and different athletes and clients, trainers, I work with, everyone reported feeling better and they actually [00:04:00] drank more fluid, which is better all around.

So check them out. We got the code down below. It's just Mike T Nelson, LMNT. com. I'll automatically. Send you over to their site. That's Mike T. Nelson, LMNT. com. And then also make sure to get the new Triphasic Training 2 book out right now on Amazon. You can go directly to Triphasic2. com. That's T R I F.

All right. And I can't even spell Triphasic. This is how bored my brain is. Let me try that again. It is Triphasic, T R P H A S I C, the number two, dot com. So just think Triphasic, the number two, dot com, and we'll have all the information there. Huge thank you to everyone who has already picked up the book.

We've got some great feedback on it. Thank you so much. We hit the, some of the number one [00:05:00] and number five position on some of the top selling books in Amazon, which is amazing. And I'm, feel so much better that people are actually still interested in buying old school books. That also makes me feel warm and fuzzy.

And as of this recording, we do have the Kindle version submitted. We are just waiting on Amazon to get back to us on that. So hopefully that'll be up any day. The print version should be available in almost any country. Now we've got pretty much every country approved. If you do not see your country, please contact us and let us know.

We'll see what we can do. And then we also have an exclusive hardcover coming at some point in the near future also. So big changes there. And we have a bonus item. If you still pick it up this month probably have a different bonus item potentially next month in January also. So go to phasic two.com And

without further ado, here is the coauthor of the book and the creator of the [00:06:00] Phasic Training System, Mr.

Cal Dietz, enjoy.

Dr Mike T Nelson: Welcome to the podcast, Cal. How's it going, man? Good,

Cal Dietz: man. Good to see you again.

**Dr Mike T Nelson:** Yeah, it's a. I actually saw you here last week when we finished the book.

So I got a copy of it. It's just behind me here and it's finally out now believe it or not. I know some people still don't believe it.

Cal Dietz: Yeah, it's we're telling people about it but things were changing fluidly and we're finding more stuff and we were You know, how can we relay this information to people, the right way.

So, and each thing had to give me a little time and for us to talk about, Hey, this is where it's going. I think this is what's working. So, just those things that we could work on and collaborate. So.

**Dr Mike T Nelson:** Yeah, and you had so much new stuff that we ended up by basically all the stuff I had written based on the things since Triphasic 1 starting [00:07:00] about I started about nine years ago And then about three years ago.

I got stuck in someone I got stuck for yeah I got stuck in Costa Rica for I think yeah right around that time where I couldn't get back to the U. S. because of some COVID reasons and stuff. And I just ended up canning everything that I did and started over from there. Which is good, because I think in the end it's about as updated as you can get in a book.

As opposed to, getting something that's already five years, three years old already.

Cal Dietz: Yeah, and that was five years ago nothing some of this has just been updated from five years ago. Oh, definitely. And people still don't know about it because they haven't released a lot of it, right?

They can come and see it, but I had one person had visited me and then bought the book and was like, okay, the book makes me comprehend everything that was going on. Oh, nice. You know what I mean? So, and it's hard. [00:08:00] Even my interns are here a couple months, they still don't comprehend everything.

You know what I mean? It's just, because it's a, and the unique thing I think that we got, In the book is that of it has to change your like it'll change your program if you read it But it's not like completely undoing everything that you believe it. It's just really add ons and hey change this here think that's the big thing you know, I think the things that could change is maybe if you were a diehard olympic lifting style coach like I might need to add some more things that transfer Not to the Olympic lifts don't, but it'll make it more of a complete package.

If I look at some of the performance patterns, cycling and the functional complexes. Right. I think people could gather that right. And I've actually switched a few of those guys over who are that hard Olympic lifting style, and then they're like, Okay, I see what you mean. I do see what you mean once I added some other exercises into the Olympic stuff that were more athletic and more pattern driven.

So, yeah, I'm excited [00:09:00] to hear what people feedback on that.

**Dr Mike T Nelson:** And when did you stop using Olympic lifting? You want to talk a little bit about why you stopped using it? Because I know that question still gets brought up.

Cal Dietz: I think it was around two It was in 2004, so It's about 20

**Dr Mike T Nelson:** years ago. Yeah, 20 years ago.

Cal Dietz: Well, and I should say that with the majority of my team, majority of my team sports, right? I still used it until I coached, track and field and the throwers until about 2014. Okay, but a majority, and we're talking and really it was a, is a great, I think they're great tools and those kids dearly loved them and they believed in them, but most of the other teams didn't, so, and if somebody believes in them, right, and they're just a tool, it's just really hard to coach them. With somebody that doesn't believe in doing them, right? Is that the issue

**Dr Mike T Nelson:** that the amount of time you would spend to convince them and to [00:10:00] work on technique On a group of athletes who are like, I don't care if I ever do these damn things again,

Cal Dietz: right?

And then the you watch them you watch the same highly motivated kids go over and do pliers and rip them or a loaded squat jump and they're ripping it relentless. Right. And I'm going, yeah, I can do, so two things, like I remember, and it's just confirmed and it was probably a, it's just due to the athletes.

But I remember in two or four, two or three, I, we were doing them first half of the season with women's ice hockey. And they came back in December or January or late December, January. And it was like, I'd never coached them in my life. And I felt pretty good when they left right in December. So then I'm like, all right, we did it the first day and I'm like, I'm done.

We pulled them. And then we did squat jumps, hex deads, plyos, combo instead. [00:11:00] We won a national title. And I'm not saying that's the reason, but we still won.

**Dr Mike T Nelson:** Good. It wasn't like you fell to last place.

Cal Dietz: No, we won the national championship and we had some players on that team, right? Like some of the best in the world at the time.

You can throw out Natalie Darwitz, you can throw out Chrissy Wendell, right? Like she was, they were two awesome. So. And then I just dropped them with men's hockey. I had a conversation with them. They're like, please, it wasn't even well, you sure we're not missing anything and they're like, please.

I was like, okay. And then, but then you turn around and look at the thrower who could, I had a, I've had a few that, that could clean and jerk that did four 40, right. 200 kilos. So I'm not saying they were bad or good but they were just tools, and then so that was really the big drop in them.

Yeah. For me was in 204 and again, it's effort right to me. It was is about effort. I have one more quick story I have a colton a basketball name. I'll call him colton. That's what his name was. [00:12:00] He he came to us He was like 6 11 We test him on some things and I think he hit about 185 maybe 200 for three.

It was 6 11, right? Out of high school and then

**Dr Mike T Nelson:** what lift was that? He had that. I'm,

Cal Dietz: sorry. It was the powerpoint

Dr Mike T Nelson: parkland Okay, got it.

Cal Dietz: And mike then we go You And we start training and I was like this is a complete waste of time. So I didn't do it with him cause he wanted to do power clean.

So I'll write a program for Parkinson's. Well, we just started text deadlifting and plyoing instead. And Mike I think, and I asked people this, do you think I might've been able to get him to do maybe two 25 for three by the end of the summer in power cleans, but instead he did a, he was six 11 did four 65.

For five and then we'll go do box jumps. I'm like, we got him and he put a couple hundred pounds like on his. Or probably 150, 465

**Dr Mike T Nelson:** is a Hex deadlift, right?

Cal Dietz: Yeah. The Hex deadlift. And you're going, I'm going, what do you think we get more out [00:13:00] of multiple sets of five at 465 and he's crushing it goes over and does an unbelievable box jump.

Put seven, eight inches on his vertical with that instead of doing three. Reps of 220 to 25 on power clean. What do you think we're going to get more out of right? There's just he was so much more explosive than and and so I'm just like, yeah, I just Those are the two stories. I'm like, yeah, it just tells me the whole full story.

So

**Dr Mike T Nelson:** Yeah, and I just think of any tall athletes I've ever seen power clean even when it looks good It doesn't look good if that makes sense.

Cal Dietz: Oh.

**Dr Mike T Nelson:** Just trying to get to that position by an arbitrary, 45 pounds on the side and just damn that's such a far distance to go in that Style of movement to again doesn't mean it's Bad, but man, for those tall people, that's, it's like another universe.

Cal Dietz: Well, the hard part is the complexity of the movement. Right. And people say, well, I can teach people to do it. So can I, I, I used [00:14:00] to watch I've watched so many hours of training, hall tapes and training methods for Olympic lifters and like programming and periodization really started with them.

Right. Oh, sure. Yeah. In the soviet stuff from the 60s 70s and 80s. Ultimately it's just i'm sitting here I go an epilepsy movement even if I could teach the kid to be great at it I truly don't think it's a good year and a half to two before you can really get some hard training effects from it

**Dr Mike T Nelson:** Yeah, because you're taking that time and you're missing that time to apply it to something else that has a Shorter learning curve and now you can probably get more adaptations because you know in your position You've only got a couple of years at best and now it might even be a year or two depending on kids transferring in Transferring out all that kind of stuff like you have a short time window to get an effect much less Limited by the season and off season and everything else

Cal Dietz: A hundred percent, and honestly Mike, the with in the, on [00:15:00] triphasytraining.

com, if you go to the tools in the jump squat calculator, right? So people, if if they don't know what it is, you can go there and check it out. Basically what I did was I took, well, what happened. So basically I created a tool. I ran a bunch of numbers and variables, and we wrote about this. Did we write, oh, we didn't write about this in the book.

**Dr Mike T Nelson:** No, we used the Perl performance optimizer. We went with that instead. Which we'll get to next.

Cal Dietz: Yeah, we can get to. But, basically. It's a, I like squat jumps, but I was always going, I knew, well, the thing about Olympic lifts, okay. I knew what they can roughly max. So I can, I'm going off percentages, right?

Well, jobs, I'm going, yeah, I don't know the percentage, right. So then. I was always for, and this, it, I, this took two decades to figure out. I didn't work on for two decades, but the point was, is I don't know what loads optimal. And then so, and it was always in the back of my mind.

I thought we did some stuff with track and [00:16:00] field, which led me to my conclusion about four years ago. So then a guy was online and he says, Hey, I

figured out the optimal jump squat look, and I'm thinking, Oh, yeah. And it's individualized. I'm like, Whoa, that's just what I'm all right. Yeah. He says, buy this ebook for 120 bucks.

I was like, well, he must have something because I'm gonna pay 120 bucks. So I paid 120 bucks. And basically it was, Hey, if you run a five flat hold, 25, if you run a four, seven, hold thirties. And if you're under a five, four, seven, you're under a four, seven, hold 30. I was so livid, man. So for the next two months, we ran tests and loading models on the jump squat in our programs.

I changed my program to run these tests and collect all the data I could grab that, and I had old numbers, everything, and I ran a few thousand [00:17:00] numbers when I say that. And because I actually had old numbers, it was crazy because I've kept every number I've ever collected on people right so there's there's millions of sheets of data or lines of data.

So, and then I figured out and we ran, and then what we did is we ran some key numbers. And we took her in my interns through loading models. And I said, I think this could be right. I was a little bit off on each one of those zones. So then I'm like, Hey, if I'm trying to get max strength and I still want to do a jump squat, what load should I have?

So I actually figured out shifts from the load you should use from strength. If I'm in a power phase, what squat loads I should or squat jump loads I should use for power and if I'm training speed. So let's say you're 200 pounds you you're a pretty strong kid. When you're doing speed, you're going to hold like 40 to 20 pound dumbbells.

So 80 to two 40 pounds total. And if power, you're going to, you're going to jump a little higher or we're going to go a [00:18:00] little higher. So you hold 45 to like sixties total. Right. So, because, and then what I did was we majored the amount of power people reducing, and then when power dropped off, that was cause, and they were jumping higher, that was more speed.

You know what I mean? So, that was finding that tool. So that's how we load our kids. We use that tool. Run the kids number in there. Record it. Hey, here's their zones. We're in strength. We know this kid is on a sheet. He goes, Hey, he has this loading squat jump today. So, and that was the thing I was like, I spent years trying to figure out what was the best jump squat loading model until somebody I felt took me for 120 bucks that kind of motivated us.

Yeah, it's, and it's I feel it's a pretty good model. We get some really good. It just makes more sense when you'd see people doing strength and they're jumping with a heavy air load and doing speed and you're like, okay, this kind of worked out.

**Dr Mike T Nelson:** Yeah, I think one of the things that for me looking at all of it is if you ever looked at something at the end and you're like, that's almost too simple, [00:19:00] there's no way that can work.

And what I'm thinking of is the two week phases for strength, power and speed.

Cal Dietz: Yeah.

**Dr Mike T Nelson:** And so we simplified a lot of stuff into that. And it makes sense, right? Because you're thinking about, okay, yes, if your athletes are really weak, they need to work on strength for a while. But at some point, we know that all three of those have this interesting interplay with each other.

Like you can't just work on speed to all of a sudden get faster for infinity. Like you can't just work on power because at some point you need to get stronger.

Cal Dietz: But

**Dr Mike T Nelson:** then when you get stronger, your power drops off a little bit. So now you got to go back and work on power and then work on speed. You want to talk a little bit about just that alternating two week model and then how you figured out using sprint times to auto regulate that.

Cal Dietz: Yeah. But I think it's like

**Dr Mike T Nelson:** the evolution of kind of what you're talking about here.

Cal Dietz: Well, well, with Mike, I knew and gosh, was it Milsif [00:20:00] that talked a little bit about years ago that periodization was flawed. And when I read that, I was like,

**Dr Mike T Nelson:** I believe like late, correct me if I'm wrong, but I think later in his career, he had a bunch of stuff where he hated periodization.

And then there was a whole kind of uproar in some of the literature if you look at it. And then, other people from the other side said, no, it's not. And I don't, I think a lot of it depends on what is your definition of periodization too.

Cal Dietz: Yeah. Right. But you're sitting here going, okay, periodization is way different than individualization.

Let's say, right. Yeah. But ultimately, when Mel made those statements and he gave me a few examples, and I was like, you know what? Periodization works. I'm not saying it doesn't. And I don't think he was saying it didn't work either. But there's I think

**Dr Mike T Nelson:** he was saying as it was done at that time, it was broken.

That was my interpretation. It

Cal Dietz: wasn't optimal. There's just no way, right? We knew that. And Mike, you and I you and I have had that conversation many times about, Hey, I did this, which is completely against the norm for this particular [00:21:00] person. And the results I got was profound. Well, we had, you were able to identify that.

Right. So you knew that doing a general periodization program, I'm going, yeah. I but here's the deal. I knew it was flawed. Mike, I didn't have the answer though. Right. What's the ultimate answer.

**Dr Mike T Nelson:** Yeah. So this doesn't work then. Well, okay. Well, what do you do?

Cal Dietz: I couldn't say it didn't work. Cause I want a lot with it.

But it wasn't optimal. I knew it right. You didn't get

**Dr Mike T Nelson:** the greatest result. You could have gotten.

Cal Dietz: Yes, of course, right? So, you know because if I take a kid like and i'll use this simple I typically would go triphasic which is basically a strength phase right eccentric guy. So it's heavy Concentric there's six weeks get a download and then we go into the power phase which was like, 75 78 to 55 in my world and then eventually let's say I get to the speed loading model You That I switched over to about 12 years ago, maybe or 40 at 12, then still, we're doing light load.

So we go from heavy squat. Eventually, 10 weeks later, we're doing [00:22:00] speed or squat jumps, right? With 25 percent on the back. And I'm like, well, here's the biggest question. What if that athlete walked in and that's exactly

what they needed. Yeah. So I wasted, I didn't waste 10 weeks. Cause we made his tendons and bones more dense.

And. especially with the females, right? But I'm going, because here's what I saw. My, my veterans didn't get much more out of the strength phase. It got better. Didn't get much more on the power, but holy buckets, when we were in the speed phase, did I see something? There was magic that happened. I'm like, I'm going.

If they got better in the speed phase, maybe that's what they needed when they walked in 12 weeks ago. Yeah. So I felt like I was a idiot in training, per se. Right. I was an idiot and trainer at this point, and I'm 16 years or probably 15 deep, maybe 12. But you're going, [00:23:00] how did I miss this?

It was right in front of me the whole time. So then I had to figure out a way, Mike, to say, when you walk in, I'm going to test you and know if you need strength, speed, or power. So basically during COVID, I went through, and I had years of testing Of numbers of track kids. I had 10 flies from them when they ran them.

And I don't even think our track coaches knew, but when I do a test and they have the 10 fly numbers, I would be like, I just write that in. So, so Mike, from, I had power cleans everything. We would test a lot and I was just having fun, right? That's my fun day really is to see. And then with the testing that we did, Mike, I was able to correlate, Hey, this, I remember this kid, here was his body weight here.

Here's how strong they were. And then I looked at the tens and the twenties. So what transpired, I ran a ton of numbers and on thousands of lines of data on my athletes. And then I was like, [00:24:00] I'm going to say, and I ran some results and then I'm going, okay, this looks like here's the cutoff that if you need strength or power is right here based upon your times.

And then, so I ran those numbers. And I was like, man, this makes a lot of sense. And it's telling me, Hey, and I remember all these kids, right? It's baseball kid, 600 pound back squat, pretty impressive at two 10. And with no gear and you're going in, this is an Olympic style, but he didn't, he like, he needed more speed.

Cause that's what his number show. I was like, yeah, that makes sense. I remember him. So my, my, my recall and all the athletes and I had their names. Was like, okay, this has made a lot of sense. So then I went and took a bunch of

NFL combine numbers and I got the same results. And essentially what happened was if somebody, if it, if my formulas told me they needed more strength, I'd look at their, I'd look at their two 25 tests [00:25:00] and they had bad numbers.

So there was only like 3 percent of the people didn't fall into what I said. So they ran and said they needed more. They needed more strength. I looked at the bench press and they did really well in the bench press. So only 3 percent of those people were outside the norm. So I'm sitting there going, I'm going to go with it.

I think I'm on for NFL and most NFL guys, they just they didn't need any more strength. Right. So most of them needed a speed anyway, even though they were fast and the dudes that were super, super fast in their position. We're topped out. It looked like might need more power or strength to get to another level, right?

So, so what I and then I spent a year I spent a year and a half probably running numbers training this model. So my kids come in. They run a 20 yard dash with a 10 yard split time. And lo and behold, it tells me this kid needs power. This kid needs speed. So I started training people. They walk in and I figure out if they [00:26:00] need a strength, speed or power, whatever the test showed, they were like, wow.

Okay. And where I really got them was my, I had two kids run pretty close to the same 20 and one kid says I'm in speed and we ran in the same time in the 20, but my buddy's in strength. And I'm like, this is what the numbers told us based upon your 10 yard split to that 20. So the kids bought in with that.

Does that make sense? Yeah. They were like, holy buckets. Okay. And then they just, and then they would get faster and their 10 would get better, and this kid's 20 would get better. And then we retest and they were and the athletes were like, okay, what do I do? This is my number. Got it. And it's like they're able to say, Hey, this is exactly what I need.

I had a, I have buddies that I'm with for two training blocks and then the next training block, we got to split from each other. We're doing different stuff because, and then I realized, so for everybody to quick overview, 70, like if you look at it the, if you took a typical [00:27:00] periodization, what I found was only 20 percent of the athletes that I trained for the year, two summers, basically followed traditional periodization.

So then you can only imagine, Mike, I realized I'm, I've been wrong. I've been pretty much optimal 20 percent of the time for two decades now. When it makes you feel warm and

**Dr Mike T Nelson:** fuzzy, right?

Cal Dietz: Yeah. Programming for my athletes, right? Yeah. So I'm going, Oh boy. That's a great screw up Deetz, right? But it's the best I had at the time, so I, I do feel a little bad, but I was searching, it's the best I had at the time.

And that's what any coach can't, with your knowledge at the current time, don't feel like, was I screwing people up? No, because we got crazy, we got good results. But again, right?

**Dr Mike T Nelson:** But if you didn't get those results and you weren't at that point, you would never had that problem to figure out, which has never led you to where you're at now either.

So,

Cal Dietz: yes, [00:28:00] right. Because when I stepped back, Mike, I look at this, well, why? Okay. I went, I trained an athlete for eight weeks and we went to speed. We got profound results. And then I, this kid got profound results and strength. Well, why can I shuffle this, these things around so I can get pretty, really good results all the way through the summer versus waiting to a certain.

So, so that was the one thing now, Mike, the there's another 30. So 20 percent did periodization. 30 percent of those kids actually did a reverse periodization model. So they went speed, power, strength. So if I had just flipped what I did for 20 years. Backwards, I would have got a better result.

That's another tough pill to swallow. And then there's the 50%, which was a, of, it could have been a combination of both the others, reverse, but it was a mixture. They just didn't follow the paradigm.

So, and and I think the 50 percent probably got the better results because we, [00:29:00] and I shouldn't say that, who got the best results was the traditional, but the reason they were traditional is because they were, most of them were young when you looked at it, which makes sense because you need strength and then power and then speed.

And that's, that was the traditional model. All my veterans flipped it or mixed in, even they're mixed, Was more of a reverse periodization and that was like 16 to 20 weeks of training. So anyway it's something to play with. I would recommend, as Mike, on that tool, we've had these conversation that with that tool let's say it tells me, Hey, I'm coming into the end of summer, this athlete's got to go to a training camp.

It says she, he or she needs strength three weeks left. I still do speed because speed will get them optimal for sport. So. I tell people because it's the end of the

**Dr Mike T Nelson:** season, you're saying right

Cal Dietz: into the training session, so they gotta be optimal to go. You don't want to do a max strength phase right before camp.

You want to do that. Let me be slower. Yeah. [00:30:00] So, and you and I, so it's all these things we have are just tools for coaches to make decisions on. And that decision tree, if you make one or whatever you're going to use I think it broadens the young coaches decision tree skills, right? So, for example, Mike, when I listened to you talk about conditioning and the metabolic flexibility and everything going on, like I'm going, this is awesome.

Mike's decision tree is so big because of his experiences that he's done. Right? So. As you and I've talked with this whole book and your ability to explain some of this stuff to people, because look, I tell people I'm in too deep of this stuff, right? And Mike is able to step back and say, Cal, they're not going to know what you're talking about.

He's nobody

**Dr Mike T Nelson:** understands a word you said, bro. What

Cal Dietz: was that?

**Dr Mike T Nelson:** But no one understands a word you say. Yeah, right? And you're like, You can see them like,

Cal Dietz: Whoa! You do a little bit. You do [00:31:00] mostly. I'm not gonna lie. But usually within one question, you haven't figured out. So I compliment you on that.

**Dr Mike T Nelson:** Oh yeah, I still stare at you that way a lot too.

Cal Dietz: I'm in too deep to what I'm doing there, right? So your ability to speak cow, right. When cows in too deep and say, here's how we got to say that. I'm like, oh yeah, that's what I said. No, I applaud you greatly on that, but then, but again, back to the hopes of this, Mike, is that all this information that you and I were able to disseminate to people.

And that you did an unbelievable job, said a young coach now has larger decision tree.

**Dr Mike T Nelson:** Yeah. You know what I mean? Cause they know where to go. Because I think that's the, I just think back to even when I started and just even, questions you get from early coaches, there's so much information now.

And that was one of the hard things with the book is we just didn't, [00:32:00] we just didn't want to put up more information. We wanted to say, okay, how do we. Simplify this, make sure it's correct. And that it's actually, it's almost at face value in some areas, like too easy to apply. Right. So like the pro performance optimizer run a 10, one to 20.

Now that'll tell you, do you need power? Do you need speed or do you need strength? Here's your percentages of what to do. Obviously you have a lot of flexibility within that. What exercises, what model you want to run. But I think if most newer coaches even did that, correct me if I'm wrong, And it would allow them to learn by doing but to run a model that has been proven to be effective over time that is auto regulating based on the athletes that are in front of them in a simplistic way.

Cal Dietz: Yeah, right. And I have email, like I got emails from coaches on using this and Hey coach, every one of my kids says they need strength. Is that right? And I'm like, well, where are you coach? He's Oh, I got the high school freshman group. [00:33:00] Oh, well, yeah. I'm a hundred percent positive.

Right. Yeah. He's well, then, but the other coach and. The head guy is running the veterans and he's more or he's 50, 50 on this. I'm like, well, that's about right. Then for sure. And they, and I wouldn't say you might always get 50, 50 with your veteran high school. But they, I it looked like they were running a really good program.

So when I say that, just because there was a lot of buy in and they had a lot of kids in it. So you're going, yeah, the kids get strong, fast high school kids get so strong. So it's crazy, but yeah, that Mike the decisions, the ability for coaches just, I think the big thing is, and don't always go off what that says.

There's the science a little bit. And, but yet there's an art form to this coaching.

**Dr Mike T Nelson:** No, there's always going to be an art form. That's never going to go away.

Cal Dietz: Right. And here's the deal. Let's say you're coming in the end of the season and I got a kid that says, Hey, your [00:34:00] thing says speed, we're getting you ready for camp.

And they go, you know what though, coach, I feel better when I do power and I know power might not be the best thing for him. But if that makes them feel better, that's what I'm going to do for the two weeks.

**Dr Mike T Nelson:** Oh, totally.

Cal Dietz: Right. Because they're like, yeah, so, so it's not only that's the art and then, you know what, that kid's in a positive mood.

He feels confident. Cause he loves, he just loves to do the power lift. I'm not saying power lifting. I'm just saying with the squat, jump, load and everything. He's I just feel better. Well, that's what we're going to do because you need to feel good, baby. Right?

**Dr Mike T Nelson:** Yeah, I think of it similar like my heart rate variability and how you've used that and a mega wave and a bunch of other stuff.

It's, one of the criticisms I get from people is, Oh, so now you're just outsourcing all of your coaching and all of your things to this device. And I'm like, no, I'm using a device to give me information, especially in an online environment where I don't get to see athletes every day walk in to say, Hey, what is the status of their nervous system?

What are they looking at? And then we get to decide what we want to do with it. I've [00:35:00] had. Athletes that are red tell them to go to the gym and max out on rare occasions, you know So it's not like I think it's absolving you of a coach of all your decisions It's hopefully giving you better information to allow you To use your experience to make a better decision for that person who's in front of you at that time

Cal Dietz: 100 percent and that's to me.

That's so exciting because

**Dr Mike T Nelson:** That's

Cal Dietz: coaching So i'm giving them a good tool but as you and I talk Like it's not only hey, this is what I made a decision on but then if you're doing they're doing hrv Then I can look at how they responded to our decision.

**Dr Mike T Nelson:** Yeah, what happened? Was I right?

Was I wrong? Yeah. Oh, oops. I roasted that person. Well, let's pull back now before the wheels fall off

Cal Dietz: Well, which yeah, which can be good which can be fine if you roast them On a Friday.

Dr Mike T Nelson: Yeah. On a Friday, you're

Cal Dietz: probably

Dr Mike T Nelson: fine.

Cal Dietz: Yeah. Cause you've got the whole weekend to recover.

Dr Mike T Nelson: Yep.

Cal Dietz: You know what I mean?

So, and there's times where I've roasted kids and I told him, look, we're [00:36:00] gonna, we're gonna put you through a phase. It's ugly, right? Yeah. Heavy eccentric, super maximal loading. And I said, you're gonna be two weeks of bad. Well, he went one, two days in, he turned South. But then by the next week, seven days later, the last two days, his HRV were unbelievable.

So he'd adapted to the heavy Superman. I'm like, okay. And this kid said, coach, I don't know what you're talking about. I feel great. And I'm like, Okay. He's last week, Monday, I didn't feel this the second Monday. I didn't feel that great, but I feel great now. And I'm pretty sure it's hormone levels skyrocketed.

I know they did. Right. I didn't, I don't have a test on that one, but there was no question talking to the kid. So,

**Dr Mike T Nelson:** so do you find those more resilient athletes? Like they have a shorter bout of showing more stress with the same load. Like I've seen some people where their HRV goes south, goes bad. And then all of a sudden it starts getting better.

Even though the load was almost linearly going up and other athletes [00:37:00] have just, it was like a bunch of lemmings off a cliff. Like they were beyond bad and I ended up pulling the plug. But again, I would not have known that without having that measurement. And in that phase of a distress session being like, okay we're actually going to try to put a fair amount of stress on you and see how far we can go.

Cal Dietz: Yeah. Well, right. Because as a young coach, you might be going, Hey, this worked for three other people. Why is it working for this person? Oh, I don't know that. You don't know that answer. We don't know that answer, but you have to make a decision now and say, this isn't working. Right. You can't shove that person into that round hole per se, if they're a square peg, and you can always too, Mike, you can probably have stories that's after stories on this one. But if someone literally hates a training model, let's say it's super maximal loading eccentrically. They're going, yeah, they're going South. When you're doing it because [00:38:00] if you don't like or believe or just literally hate the thing you're doing It's even more stress on you when you do it So, I think, those are all the things that over years of testing people we figure out.

**Dr Mike T Nelson:** Yeah. And that's one of the things I look at when I ask an athlete Hey, what did you like in this block? What did you dislike? And I tell them like, just because you dislike that does not mean I'm going to get rid of it. But in my head, I'm going to go, okay, if you dislike these top three things, and they're all trying to get at this type of adaptation, I'm probably going to try to modify them or I'm going to take, try to tweak things around a little bit as best I can so that you don't hate it as much.

And sometimes you just have to shorten the dent, the time, maybe only do this for a week or two or. Or whatever, but I think the psychological aspect of it, the longer I've been doing stuff, I find is sometimes even more than the physiologic. And it's so variable from one person to the next too.

Cal Dietz: Oh yeah. It [00:39:00] would be great to be able to quantify the mind, right?

**Dr Mike T Nelson:** Yeah. Even just like when you ask athletes, like even in emails, I get like when they had like something that was read you'll see, Oh, I

definitely can't do anything today. It's Oh. Well, how do you feel? Do you still feel okay? Do you not feel okay?

Do we have other markers to look at? And sometimes I'll say, just go to the gym, do your warmups. If you feel good, then just, continue on because I don't want them to always feel like this self fulfilling prophecy of, Oh, I had some stress. I'm going to collapse. It's Hey, you might be okay.

There are those times where you get through your warmups, you start your work sets and man, it's not there. And you just walk out of the gym. But, you, a lot of times you still don't know, and you don't have that data until you at least test it to see where you're at, but,

Cal Dietz: Yeah, I usually just tell him to do some light arms, right?

That might cheer him up. Yeah, doesn't really work. Hey, just go do some light bodybuilding. I found light bodybuilding is a great recovery tool. I got that from, even I was in a conference in 202, maybe 203 with Buddy Morris [00:40:00] and Tom Malensky. Oh, nice. Literally Verkhoshansky Joseph Johnson was the host, right?

Oh, cool. Ultimate. What is his website? Ultimate athlete,

Dr Mike T Nelson: Ultimate athletic concepts. I think. Yeah. Ultimate athlete

Cal Dietz: concepts. Yeah. And he has unbelievable books with all the Soviet stuff. Right. But we were in there and then Yuri Verkoshansky was like, Yeah like bodybuilding methods or recovery and I'm like, what?

And I looked at him before, so he was all excited because he's, he liked bodybuilding, right? And he was like, what did you say? And I'm like, he just said that. And I'm like, and then I got to thinking, I'm like, oh, you know why? Because it moves blood around and blood is a key factor in recovery. And so I went back and tested.

I was like, I had athletes that were shot. Hey, you're going to do my super endurance, light loads, get 16 reps in. Don't strain, don't struggle. And later that day we brought him back from Megaways and they were in a lot better spot, really, but biking will do that too. So it's just, it's really like day after football game, [00:41:00] they come in and do light lifting and moving blood around is what you're doing.

Right. That's a magic in regards to recovery.

**Dr Mike T Nelson:** Yeah, if you look at a lot of all the nil Soviet stuff on recovery like you could literally simplify it as Different modalities to move blood around whether you're doing sauna contrast light aerobic, 1 by 20 You know take your pick maybe even East M stuff like that.

I mean you're Literally just, and I tell people like, just, don't believe us. Like just on a day you're, you feel like you're pretty tired. Just if you have the opportunity, be a sea slug, just sit on the couch, do nothing. Don't walk, don't do anything. And the next time that happens, take a walk, do some light movement, do some cardio stuff, like just, get some movement in and pretty much every single person has come back and said, yeah, when I got that light movement in, I just feel a lot better.

And you can look at their HRV, all their metrics are definitely better too.

Cal Dietz: Well, like I've said this for years, but one of the best recovery methods I've ever seen, [00:42:00] majored, was a 20 minute walk. Yeah. I'm profound at the results of that, or just the improvement I saw in HRVs and all kinds of things, right?

It's just unbelievable. Not moving is not good.

**Dr Mike T Nelson:** No. Do you want to talk a little bit about, we have a bunch of aerobic methods in here, which, for primarily a strength training book might not be something people expect at face value. You want to explain a little bit of why all the aerobic stuff is in there?

Cal Dietz: Well, again I will do those on athletes are super trained too hard. You know what I mean? On a

**Dr Mike T Nelson:** day or easy day.

Cal Dietz: Yeah. Yeah. We use those methods and train hard. In the fitness phases of maybe the pre training or GPP model. And the biggest thing there I do is try to just get a lot of variability, right?

Like my big, like my hockey teams are coming back. It's January, December, they'll come back and do my 80 station circuit. [00:43:00] And that includes like grip, neck, calf, spring, egg, or. Everything, they're, they'll do it barefooted. They'll do, you'll use a lot of methods, but it's a lot of variability.

Why? Because I'm trying to train every little detail of the organism, not maximally, but just to create. And when I found that the more let's say create not creative, but the more variables I applied into that early stages of training and the base that they were building would get bigger, which then if you have a large base, And you put them into a program, they have all this biological energy to adapt to that program at the highest level.

So I jump into a heavy eccentrics or a power. Once I got their bases bigger it would, I would see even better results from that two to three week program if I ran. And then Mike but you see this with your veterans, right? So, My this isn't anything new. [00:44:00] It's just it's in front of most people's bases when they start training Is that why does a freshman come in they do this program and they just they die But all my vets that are not getting crushed and they're crushing the program Well, it's because they got four years of base work done You know what?

So training age base or whatever you want to call it in your world so like the biggest thing is that The more dynamic of an athlete I realized You After 202 203, the more dynamic of an athlete I could create to go into my specificity of the needs, whether it was eccentric isos, concentric power, speed, I got better results if the base was bigger, so now if I have a freshman that walks in who's extremely fit, ready to go, I will do one week of the base building and say, okay. And I see this, all my workouts are like, the heart rate's not that high. They're crushing it compared to the other freshmen. You're going right into triphasic eccentric

These other freshmen, I [00:45:00] might spend two to four weeks getting them in shape before we jump in. And that's my judgment call. Right. Yeah. Yeah. And they see, usually I like to have that with one person. So then they see, they're like, why is she going to that program? Or why is he going there? Well, he's in shape.

At a high level, and he's ready to do those programs. So that actually motivates the other ones to go, right? To go, yeah, I want to start those, so I'm like, all right, well, let's get in shape. Let's try not to drink too much over the weekends. The next two weekends. That'll help. They're like, really?

I'm like, yeah, that'll help. There'll be less setbacks. How's that? Yeah. But, and mine are just guidelines. Let's say the metabolic injury prevention running like if you just jog straight ahead like we talked about in the book in the heart rates are 110 120. That was the pace I said, but then you set the same pace and you karaoke and then you backwards run and you just trade them out your heart rate went to 160.[00:46:00]

And I was like, so I can train them at a low intensity, but doing a non, a non normal pattern per se of jogging forward by just doing the same speed, but doing karaoke backwards, shuffles, whatever the heart rate goes that far. That's what I'm going to do. And that's how we'll train people like, well, what do you do for ankle stability?

Well, well, my whole GPP basis will run and we'll do metabolic injury prevention, running, we're running sideways and barefoot. You know what I mean? So I feel that's a little bit better. Then doing an ankle stability drill on one leg. You know what I mean? Because they're absorbing impact and those feet are working that way.

The way they're going to happen in sports. Now, if there's an injury, sure. Do your single leg squat and touch cones or whatever you want, but that's not the speed and that's not anything near, I think that's for injury versus sports training. And we should probably write that down, but let's talk about how, at some point, Mike rehab.

Is considered training and it's not training. Right. [00:47:00] And it should just be labeled rehab because it's okay. There's athletes that I have to do that stuff with because they need rehab from an injury. But when we're training, we don't do that. We, I feel it's like a waste of time because in the magic is there's not enough.

**Dr Mike T Nelson:** Yeah, your stress level is too low to get the adaptation you need for that particular sport.

Cal Dietz: Right. Because if I'm going to, if you think that single leg RDL, bending over touching cones coming up is good for that ankle, but they need to run at eight meters per second, stop on that ankle and change directions.

That's a whole different they're not even in the same world. So yeah, that, that's the big thing. It's not the same. So, ultimately, and neither is jogging sideways doing karaoke. Having your foot hit the ground is the same as running at max speed and change direction, right? It's [00:48:00] not but that jogging sideways.

It's much closer to what we're going to do in sports. So don't yeah again I think a lot of coaches mistake rehab for training, you know

**Dr Mike T Nelson:** I feel like a lot of the rehab stuff They did a good job on the proprioception and maybe the nervous system re education. And I get that it has

to be scaled, but I feel like in general, they forgot that you have to get all the structures back up to handling high levels of force.

Right? It's it's the same conversation I've had with Our buddy Sean Mishka, who you're like, okay, so I get it. You, if you're working with say elite NFL players in the NFL, you probably have to load them relatively heavy at some point, because these massive human beings are running full speed into another human being.

That's trying to knock them over or take them out. Like you need a high level of controlled stress to get the [00:49:00] adaptation to just survive a season, much less be better. And I get it. Like you can't risk injuring them, but you can't risk them just putting them on BOSU balls all day to train either. Because that's, in essence, creating an injury risk for someone who is already at that high level.

Cal Dietz: Exactly. Those people get in car accidents every place.

**Dr Mike T Nelson:** Oh, you just want, even just one. It's one thing to see it on TV. It's another thing to see it in person. And it's unbelievable how fast those people move. It's just blows my mind every time.

Cal Dietz: A linebacker coming downhill to fill a gap and whether he hits a lineman, that's 300 pounds or he hits a running back at two, two 10 to a five, you're going, we're not talking to two 10 normal person.

We're talking to two 10 professional athlete that, that brings it, so, the magic there is that I think. You have to prepare them for that, right? And as close as you can without doing it, because they're critical. Right, but

**Dr Mike T Nelson:** you [00:50:00] can't go too far, because if you start injuring people, then you're out of a job.

Yeah. Which I understand, that makes sense, right?

Cal Dietz: 100%. You should get

**Dr Mike T Nelson:** injured in a controlled environment. That's what, the field of play is less controlled.

Cal Dietz: Right. So, it's, yeah, it's just, I don't know, I don't know the mindset, right? Because I can remember one, I had an orthopedic surgeon, I was dealing

with an athlete, and They were, the orthopedic surgeon said, Oh, they can't do squats yet.

I said, okay. But that orthopedic surgeon pulled them into their, pulled them into their doctor's office and they did a single leg, uh, single leg, a triple jump. Oh, and I'm going, can you do that? Not a back squat? You know what I mean? I'm like, what do you think's going on? The forces that are involved in all this.

I didn't argue with him. I was just like, okay, we'll get around it. You know what I mean? And, I was doing single leg squats with the person, but I wasn't doing back squats. He's just, I don't know. Like it's even and we're talking about an unbelievable [00:51:00] orthopod. They just don't, I don't think they look at the the forces.

Involved in sports to realize, you and me to realize what's going on. So,

**Dr Mike T Nelson:** yeah, and I think it'll be more profound in the future as everything has a number on it, whether you're. Using different systems that can measure, like you've used in the past, like rate of change, speed deceleration, that's just going to get more and more finer.

And I think once people start seeing the data of how fast it is, hopefully that'll be enough for them to change and realize, Oh, wow. Like I underestimated the speeds and forces at play here.

Cal Dietz: Yeah, 100%, right? Yeah, the hard part is a young coach might realize this, but a physical therapist or an orthopedic surgeon might not understand this.

Yeah, yeah, cool. I'll go ahead and [00:52:00] label that young coach crazy or something. Yeah,

**Dr Mike T Nelson:** yeah, and that's, there's always those. I'd say discrepancies between physical therapists, even, ATs, return to play, like what is good enough? And I get it as an organization, if it's your star player that's out, you want to bring them back sooner, but you also have responsibility to do that in a safe manner.

And what exactly is safe? What parameters do you need to assign to that? And you can just look at like the List of injuries, people who've had a replaced ACL, they're still more likely to blow their opposite ACL, just a lot of, I think there's

still a lot of work to figure out how do we even have a proper eval to know when, someone really is good.

And there's a bunch of debates about what system you use and what testing, et cetera.

Cal Dietz: Right. 100%. You know what I mean? 100%. I'm just trying to think a good video for maybe somebody to look at was my lateral [00:53:00] sling. I think lateral sling reset. Yeah. I think if you search that, oh yeah. It's on the RPR website.

It's called lateral sling test, RPR lateral sling test. It's on our blog. Like I show this to, or I do this in front of like physical therapist and they've been coaching people. Hey, their glute meat's bad. Well, it might not be me. Take a look at this. And they're terrified when they, and it's well, why aren't you willing to learn? Because when I saw this, I was, I wanted to know why this was a problem and I figured it out. You know what I mean? So

**Dr Mike T Nelson:** you want to explain the test real quick for yeah, really the

Cal Dietz: test and again, you can search it on lateral sling test probably use my name But ultimately maybe we put in the notes, but yeah You test the glute med while somebody's laying on their back and what happens is I test it and let's say it's weak It's off And then I can reset it right there with RPR.

And then I test it and it's test strong. But what happens is somebody will get up and they'll walk around 10 yards down, 10 yards back. They [00:54:00] come back and it's shut off with it. Well, Oh, your method, did your method not work? No, it worked because we got a response on the table. After taking that through some layers, eventually I was able to figure out, Hey, it's a foot problem.

So the person ended up on a table, retest it's weak. I don't even adjust it. I don't even work on the glute med. I do the archery set, the RPR archery set, and I haven't touched the glute med. I go and I test and the glute med test strong. And what the archery set does is it strengthens the muscles that hold the arch together, whether you have flat feet or not, this works.

They get up, they jog, they run around, they come back on the table, and I retest them. And at that moment, I test them and they test strong. So now I found the real problem. The glute med was shutting off because the foot was dysfunctioned. And you should see some of the looks in people's faces, highly educated, going, Oh my, May have.

Dr Mike T Nelson: Oh shit.

Cal Dietz: Yeah. [00:55:00] And they go, well Kel, how often does this happen? And I'm like, you don't want to know

Dr Mike T Nelson: you. It's pretty often in my experience too, it's 99%.

Cal Dietz: I have found one glute meat problem. And Mike, I'm only gonna guess. I'm gonna guess I'm over a hundred thousand tests in my life in the last decade.

On game day, I might test everybody. So there's 50, yeah, there's 50 gluten meat tests. You know what I mean? That day. Yeah. I'm pretty sure I'm over a hundred thousand gluten meat tests. And I've only found one that was actually the real glute meat. I'm not kidding. It's usually the foot is a step anyway.

So if you want to look that up and go through it, especially as a young coach, right, that glute meat and that, and really that's an indicator of stability in your hip. So somebody can't play. Low. They don't get low. They don't do their jelly drill as well. Their glute needs probably off, but really it's a foot problem.

And why is that? The brain's gonna go, the brain's gonna go, look, I'm unstable in the foot. [00:56:00] I am going to use my big muscles to try to stabilize. Because really, my little muscles can't handle it. I think that's what's going on, right? Maybe you could give us a better Yeah.

**Dr Mike T Nelson:** The fancier word would be you also have an arthrokinetic reflex.

Meaning that the joint just If you It's like putting a lot of power through a Yugo, right? Your brain is going to say, Hey, this little joint, all this stuff is unstable, like you said. We can't crank up the power because we're going to injure ourselves and that's going to be bad. So we would rather turn air quotes, turn things off and not risk running that much power through something.

But then now you have to deal with, you've got, poor performance and people can't get into positions and et cetera.

Cal Dietz: Yeah, it's so they have a major foot problem and it's and I don't know why so many people's feet are weak. Right. I have a lot of

**Dr Mike T Nelson:** people are,

Cal Dietz: well, I have to, we, I think we can both [00:57:00] agree on, and we've talked about this, obviously our society creates weak feet with the shoes we wear everything.

And then the other one is I do think that people are making hips and knees. Quads and hamstrings so strong that I'm not so sure they were supposed to get that strong in nature. So then is the foot not, right? And then we wear shoes. So I think we're doing a really good job getting the other joints strong in the lower body, but the foot is often left out and it's just maybe doesn't catch up as fast.

**Dr Mike T Nelson:** Yeah, I would agree with that. Think of how many coaches are looking at, knee programs and hip programs and all that stuff. And for good reason, I understand why. Yeah. But you start talking about the foot and the ankle and the solution is, just tape 'em. I'm like,

Cal Dietz: Oh yeah,

Well, well, right. Like Mike, I have an athlete that was getting taped. And I said, okay let's just test this. I need to know. I didn't really know. Yeah. Tested them all the muscles wrong. Go get taped in the training room, come back up, walked [00:58:00] around, walked from the training room to the weight room, got on the table and the glute meat shut off the tape.

Why did it make the foot weak? I'm not so sure, but the feedback, the brain didn't like.

**Dr Mike T Nelson:** Yeah. I just say, just do a simple test and I get it. If this is not saying if you have an injury or things like that, you're trying to protect soft tissue, whatever. Yeah. I understand those cases, but my argument as it doing that as a preventive thing, I'm like, okay, have the athlete walk.

Just watch their gait pattern. Watch what's going on in their hips. Watch their movement. Cool. Tape their ankles. Now I'm do that same thing again. Not even move at athletic speed. Just walk. I have yet to find someone that moves better.

Cal Dietz: I have yet. I agree. And I'm

**Dr Mike T Nelson:** like, so what did you just do? So you're sacrificing their movement quality to protect maybe a single joint, but what other risks did you put them at?

And then they get mad at me and leave.

Cal Dietz: Yeah, they leave. Yeah, I know. I know. People get mad at me too. [00:59:00]

**Dr Mike T Nelson:** Or they just I'm like, you can do whatever you want. I'm not the person doing the taping. I'm just saying. Something to think about. And I know it's an organizational things. A lot of times you just have to do what you have to do and you didn't make the decision.

I understand all of that, but

Cal Dietz: yeah, I agree, Mike. Yeah. And I'm very cautious how I work things now, but it just, there's also, I

**Dr Mike T Nelson:** don't work in those organizations, so I can say whatever I want

Cal Dietz: in my organizations. My people I work with are pretty phenomenal just cause. We've worked through things and as long as they're willing to learn, we can all learn together.

Oh, totally. Yeah, so that's a big thing, having an open mind about all this stuff to, to question. And I, look, I how I come up with stuff I question everything I do too. So it's not just everybody else's stuff, but mine, more mine than anything's.

**Dr Mike T Nelson:** Yeah, and it's usually those time points where you see something that doesn't agree with what you're told, as we wrap up here.

I still remember seeing Aaron Davis stick someone on a rower, God, probably seven or eight years ago now, do a 30 second Wingate with a [01:00:00] Moxie on his quad, and watch the O2 level in his quad desaturate to 15%. And I'm like, that's not supposed to be aerobic. Like what, this is supposed to be an anaerobic.

What the hell is that? Messed me up for five years because I had to figure out okay, this device is bullshit, which I found out it wasn't or okay. What I really learned wasn't as simplistic as what I was taught. Oh, that was like a basic concept of exercise physiology.

Cal Dietz: Right. Terrifying.

Dr Mike T Nelson: Yeah.

At the time it sucks because you're like. Okay, that device is a piece of shit. That thing, there's no way, that was my first response.

Cal Dietz: Right? It's all wrong. It's gotta be wrong.

Dr Mike T Nelson: Oh.

Cal Dietz: Yeah, I think those aha movements are magical if you can, if you use them in the right way, right?

Dr Mike T Nelson: Yeah.

Cal Dietz: Some people can put like compartmentalize and box them in and they say I'm done.

I can't go there, right? My professor [01:01:00] who learned physiology in the 57 or in fit in the 50s is more right than what we got now

**Dr Mike T Nelson:** Sometimes yes, unfortunately

Cal Dietz: Yeah, they are, right But anyway, so well, all right, man.

**Dr Mike T Nelson:** Yeah when tell us more the book is out now It's on amazon and we got a kindle version coming soon You

Cal Dietz: We do.

So we're yeah, that should be done pretty soon. And then we should have a hard copy to as a

**Dr Mike T Nelson:** hardcover.

Cal Dietz: Yeah, I'm sorry. Hardcover. So hard copy. But yeah, so we're we're excited. We get a lot of emails, Mike and I about questions And Mike and I'll appropriately field the right question.

Right. So the simple ones I do, the complex ones, Mike will do.

**Dr Mike T Nelson:** Most of the ones like, I don't know what this guy said here. Cal, figure it out.

Cal Dietz: Yeah, especially some of the, like the math, the one parts on the when you read about our goat drill, right. When you [01:02:00] went into the science I think there should be a lot of like Functional optometrists or they would understand it, but it's not that hard.

It's just like a lot of people, even in physical therapy should read that section. You know what I mean? That was a really good job.

**Dr Mike T Nelson:** Yeah, thank you. I just wanted to, it's going back to like first principles, right? So okay, if you understand this drill, what makes this drill the thing? And I think if people were, this is for me, if I was educated just in those basic areas much earlier, Oh man, the amount of stuff I would have had to not unlearn would have saved me.

The countless amounts of hours, so that was the reason for it. It's directly related, but if you go back to the first principles, then you can iterate your way through it much faster instead of having to unlearn a whole bunch of stuff. Like I had to,

Cal Dietz: it's all right. It's part of your process.

That's who makes it. What makes

**Dr Mike T Nelson:** it never ending, but that's what's. That's a good part though on the other side you always learn new stuff and you end up at a higher level just like Training, sometimes you [01:03:00] have to go backwards to go forwards a little bit. It's not constant forward linear motion all the time.

So yeah Cool, man. Well, thank you so much for all your time. Really appreciate it and we will talk to you again soon for sure

Cal Dietz: All right, buddy. I'll talk to

Dr Mike T Nelson: you

Cal Dietz: soon

**Dr Mike T Nelson:** Thank you so much for listening to the podcast. I really appreciate it as always. Huge thanks to Cal for coming on the podcast. Always appreciate him sharing all the wonderful training advice and everything. And as

we stated in the podcast, our goal was a little bit different from the triphasic one book.

The goal this time was since Cal had so many different new methods, was to take these methods and to write them in a way that it's a little bit more easy to understand, especially once you have the basic of the triphasic principles down already, and then allow you to drop them into almost any program.

So you can tweak your own [01:04:00] programs by just taking one of the methods and dropping it in directly. Of course, we still have everything from the warm ups through the training methods through even a lot on the aerobic system here also. And we do have an electronic complement to the book you can get via the secret code in the book.

And that'll unlock a whole bunch of cool stuff. Done for you programs already, more in depth videos, and I tried adding up how many extra hours of content that is, and it's probably close to over a hundred hours. It's pretty bananas. And the nice part too is that we also, like I said, tried to put it in a system that you can use.

So the table of contents is from the warm up through the training methods through the transfer. So we use the turn on train and then transfer. So the three T's a la Triphasic again. So I had fun with that. So check out the book. Thank you so much for everyone who has already picked it [01:05:00] up. Go to triphasic2.

com. Big thanks to Cal. We'll try to get Cal back on again here to discuss more. Of different parts of the book and big thanks to Tecton for the ketone esters. You can check them out below. And if you're looking for electrolytes that are higher in sodium that actually tastes really good. I still like the taste of these, which I can't say that for a lot of other products.

Check out my friends at Element. Go to MikeTNelsonLMNT. com. Thank you so much for listening to the podcast. A big shout out. We've done over 300 episodes now, which is pretty crazy. Really appreciate everyone listening to sharing the podcast. If there's someone you think should listen to this podcast, wants to hear from myself and Cal, please forward this podcast over to them, or you can share it online, please tag both of us so we can say a huge thanks again, really appreciate it, have a wonderful day.

We'll talk to you again very soon.

[01:06:00] That was a great number. I don't care what you say. I thought it was dumb. Maybe you're right.

This podcast is for informational purposes only. The podcast is not intended as a substitute for professional medical advice, diagnosis, or treatment. You should not use the information on the podcast for diagnosing or treating a health problem or disease or prescribing any medication or other treatment.

Always seek the advice of your physician or other qualified health provider before taking any medication. Or nutritional supplement and with any questions you may have regarding a medical condition. Never disregard professional medical advice or delay in seeking it because of something you have heard on this or any other podcast.

Reliance on the podcast is solely at your own risk. Information provided on the podcast does not create a doctor patient relationship between you and any of the health professionals affiliated with our podcast. Information and statements regarding dietary supplements are not intended to diagnose, treat, cure, or prevent any disease.

Opinions of guests are [01:07:00] their own, and this podcast does not endorse or accept responsibility for statements made by guests. This podcast does not make any representations or warranties about guest qualifications or credibility. Individuals on this podcast may have a direct or indirect financial interest in products or services referred to therein.

If you think you have a medical problem, consult a licensed physician.