

[00:00:00] **Dr Mike T Nelson:** Hey, what's going on? It's Dr. Mike T Nelson here back on the Flex Diet Podcast, where we talk about all things to improve body composition by adding more muscle strength and performance, and doing all of it without destroying your health within a flexible framework. Today on the podcast, we've got Dr.

Mike Molloy. And we talk all about the needs and the amounts of carbohydrates primarily for high level athletes, particularly CrossFit athletes here. So Dr. Mike, who has a great name, coaches a lot of high level games competitor CrossFit athletes. And so I wanted to bring him on to discuss. Why carbohydrates are beneficial, the kind of the pros and maybe possibly some of the cons of a higher carbohydrate diet.

And what I really loved about this episode is that he has permission to use specific names and case studies, which is awesome. So you can look up these athletes. CrossFit is you can see their performance level. You can see videos of them. You can see exactly all the work and everything that is being done.

Now, granted, these are elite high level competitors, but the point here was just to illustrate the extreme end of the spectrum, because I believe the extremes inform the means. This doesn't mean that if you are not doing two to three sessions a day, sometimes that you can get away eating 700 grams of carbohydrates, perhaps.

But the point is, Most people I consult with would do better eating more carbohydrates, especially if performance is their goal. And a lot of times even body composition. If you look at the body composition of high level games competitors, it's normally extremely good. So I like these kind of extreme conversations because they do help illustrate some points and they give you a reference point that you can scale back from To reach what works for you or for your particular clients.

And this interview was so great. It's actually added to the flex diet certification under the carbohydrate section. But I wanted to highlight it here and make this a one public. So people have more information because I think carbohydrates. Are still viewed as negatives and just the macronutrient that makes you fat and there's no performance benefits to it, which obviously is not true at all.

Although I do think that is changing and starting to get better, which is great. And then also our other sponsor here is Element. Go to drinklement.com forward slash Mike Nelson, and you'll be able to get a free little cool sampler pack with that. And this is by far and away my favorite electrolyte drink.

I'm down here kiteboarding and working in South Padre, Texas. So I've been using a lot more Element than normal to keep myself hydrated. Because especially being out on the water kiteboarding, it's deceptive how much fluid and electrolytes you actually lose. Because it can feel warm, but you don't have the perception of sweating as you do because you're out playing in the water.

And I tend to try new stuff and crash, so I don't realize how much fluid and electrolyte I'm actually losing. Plus, it's getting warmer in many different areas, even back in Minnesota. It got up to 79 degrees the other day, I heard. So now is a perfect time to increase your amount of fluids and electrolytes.

I find LMNT to be a super easy and actually very tasty way to do that. So go to drinklmnt.com forward slash Mike Nelson. I'll have a link to that below. You'll be able to get all that information. If you're interested in joining the waitlist for the flex diet certification, we will put a link to that below here.

Also, the next time it will open, we'll be in June. So if you're looking for a complete system for nutrition and recovery we do talk a little bit about some basic movement exercise and neat, and you want to learn the details. That's what we go into in this podcast and you want to learn the concepts of metabolic flexibility and flexible dieting and Then you also want to learn the five explicit action items within a complete system of what to actually do so you learn the big picture you learn the specifics and You learn the exact protocol to do for yourself and clients for better performance and body composition Without destroying your health.

Many times you actually become more healthy in the process. So we'll have the link there below to hop on the wait list. Next time it opens will be this coming June and then probably not the rest of the year is what we're scheduled right now. So go there and hop on that and enjoy this conversation with Dr. Mike Molloy all about carbohydrates.

[00:05:18] **Dr Mike T Nelson:** Hey, what's going on, Doc? How are you? Good, man. How are you doing? Awesome. Yeah. Thank you so much for being here. And it was great to finally meet you in person at the NEC conference this past fall.

That was super

[00:05:30] **Dr Mike Molloy:** fun. Yeah, for sure. Same. I've I've been following your work ever since I saw you were coming to Jason's conference and yeah, big fan of yours as well. So really excited to be on.

[00:05:39] **Dr Mike T Nelson:** Yeah. Thank you. And your talk there was great, which kind of inspired me to do this one, which the general concept is just metabolism and even carbohydrates.

Because I think the thing that is probably shocking to most people is how many grams of carbohydrates, like high level CrossFit athletes eat and even other athletes. But I think CrossFit being one, you can see the physiques of the people performing. You can see their performance, like you're literally watching their performance and it being more popular.

I think people would be surprised at, one, how much it does vary, like you can't just give a set number, and then two just, the amount of food, because, Again, the average person would think, Oh, my God, if I ate that much, or if anyone ate that much, right, they wouldn't look like that.

[00:06:31] **Dr Mike Molloy:** Exactly. Yeah, completely.

Yeah, it's obvious. It's often very shocking to people, even athletes within the sport that are training with that methodology and struggling. To hear about what some other people are doing and then like you said yourself that the variety of responses, the variety of sort of things that we have to take into consideration as performance based coaches to, get to that individualized prescription for each athlete, because like you said, there's formulas out there that everyone starts with, but at the end of the day, they never really capture all the aspects that go into an individual's little world, yeah.

Yeah. What

[00:07:09] **Dr Mike T Nelson:** was the range in your experience? And if you can name names, great. If you can't totally understand, I'm not trying to throw you under the bus or anything.

[00:07:16] **Dr Mike Molloy:** Oh, no, for sure. I can talk. All my athletes are happy to share.

[00:07:19] **Dr Mike T Nelson:** Yeah. What are some of the ranges you've seen just in terms of The lowest kind of amount of carbohydrates to like the highest if we just leave it at the

[00:07:27] **Dr Mike Molloy:** carbohydrate amount.

Yeah, for sure. So again, there's a variability based upon how different athletes train. So if a good athlete has a good coach in there it's really powerful outfit. Some athletes, when you can put out a ton of power, they may not train as much volume as somebody who's much more endurance based.

And they're going to have a higher volume of output. It's something like, Jason Lydon would talk about. Nevertheless for the smallest athletes. That are power based still something in like that 380, 400 grams of carbs range. And then on the high side for, these, for lack of a better term, bison of athletes that are just powerful and can go for a long time.

This is just females I'm talking about to start with. I would say. 556 5700 as we really approach games level training and volume. That would probably be the highest. The highest numbers I've ever given out would be either Emma Lawson. So second, second fittest woman in the world. She was at about 4200 total calories per day.

Extremely carb bias, like 55 percent 60 percent carbohydrates or Sydney McAleish and another Canadian athlete. I don't know what about, it was about taboisms, but she wasn't like leading up to last year's semifinals eating close to 4, 500 calories a day. And she's a little bit of a bigger athlete than Emma.

So that'd be the female side.

[00:08:50] **Dr Mike T Nelson:** Well, how much do you like grams or carbohydrates? That would be if you're

[00:08:54] **Dr Mike Molloy:** approximately Rams. Yeah. So Sydney was doing like six 80. I think at point Emma was like low sixes. Like Emma, Emma is like a little eating machine, but she likes to stick with her foods. And so we put a little bit more emphasis into protein and fat than carbs, not it's still eating just absolute shit loads of carbohydrates, but like she wanted to have more balanced meals in there. So like her protein intake was way above what is required from a metabolic capacity. So she was eating like 200 grams of protein and 140 grams of fat and then 600 plus grams of carbohydrates.

I'd like, so it's just all relative, it's just personal preference. Again, there's all the biases that are out there and the scientific reports, but at the end of the day, you got to figure out what's worked for each athlete and yeah, just huge quantities, on the male side.

There's just as much variability. The most extreme examples of the differences that I see would be two absolutely shredded, like some of the most shredded dudes in the sport of CrossFit with very different, like caloric requirements. The first being on the low side, ironically, Noah Olsen. So yeah Noah is like, what, probably like the first or most aesthetic dude in the sport.

Like he's a

[00:10:07] **Dr Mike T Nelson:** jack looking dude.

[00:10:08] **Dr Mike Molloy:** I think it's Chandler Smith. Right. But anyways. And sure, he's still eating, 210 grams of protein, 120 grams of fat, but he only like really for his long training, maybe like 500, 550 grams of carbs. And if we do more than that, and that was pretty damn good about his tracking when we're in season, he would add consistent weight, right?

He was starting to get up to that 200, 202 range and, and so I was like, okay listen, you just have a really efficient body metabolism, and then on the flip side the Pancheck twins, so, Saxon and Spencer, both of those guys, they need 8,000 calories a day. No joke.

Two, two different twins, obviously one training with proven and the other one with Nick another great coach and they both needed insane amounts of food. And again, like They're, 190 pounds soaking wet just to allow them to eat more food. We would have their protein, like the mid 200s fat, like 170 grams, like way more than I would normally use with almost anybody, but then they're using 800 plus grams of carbohydrate.

Right? And, it's just a mixture of carbohydrate powders, bagels, oatmeal, applesauce like dried fruit, anything and everything we could use to get it down. Like the only time we touched vegetables with those guys was on rest days because they were just a waste of stomach space on the other day of the week.

Do you know what I mean? Not anti vegetable. It was just like, they ate broccoli. They'd be like, I'm too full to get my calories in. And I'd be like, okay, great. And then The week would go by and they'd be like, I've lost four pounds. And I'd be like, Jesus. Right. So, it was it's interesting.

So yeah. So two really dichotomous, like answers from, three super high level men in the sport. And if somebody had asked me how many calories Noah needs, I would have guessed like huge numbers, huge. And it just, it didn't pan out that way. And every once in a while he'll drop his macros online.

I'm like Noah. I'm like, absolutely not. You are not doing me any favors out here. But

[00:12:03] **Dr Mike T Nelson:** his numbers are almost what people want to see. And some people are even shocked at that. Like you said, that's the low

[00:12:12] **Dr Mike Molloy:** end, right? That's the low end. Yeah. Yeah. Yeah, for sure. For sure. Yeah So it's really interesting how the body works, you know whether he's just got a really great GI system that generates a really low thermic effect of food or something like that or When he's so low stress about everything Like when he's done training does all of that just go back to like baseline and everybody else's bodies are just Russian, I don't know the answer to it, but it's fascinating.

Yeah.

[00:12:39] **Dr Mike T Nelson:** Yeah, I would say the twins, this is just my guess from the outside looking in. I would call them the quote unquote, the twitchy athletes were like, they appear to be like in constant motion, like all the time. Like you've seen these athletes where like when they're tapping their toe they're doing something like you tell them to sit still and meditate and do a Zen style thing that, meditate, watch a tree for five minutes.

They're going to kill you, right. Or other athletes appear to have much more of an on and off switch and they don't seem to require as many calories.

[00:13:09] **Dr Mike Molloy:** Yes, I agree with that completely. I agree about that completely. Another really good example of that on the female side, who I told a story about before is Kristi Oramo or Kristi O'Connell.

So she's, 130, 135 pounds soaking wet and she came to me massively under eating, very sort of old school CrossFit indoctrinated about certain carbohydrates being bad for you and things of that nature. Like feeling as though she had to get huge amounts of, micronutrient dense foods in at every meal.

And, we worked her up from probably like low 2000 calories to somewhere in the low 3000 to 3, 500 range. And she's shredded out, added a couple of pounds of lean muscle, but just went from having a. a very good physique to like one of those like, holy moly, like that woman is insanely fit type things.

And what I've realized was, Christy has an advanced training and she's been training since she was like born, essentially. She didn't really require or do a lot of volume, but she was getting on the order of 25 to 30, 000 steps per day as a coach at her facility, right? And so, her I think when she was calculating, doing her own nutrition work or working with other less wonderful companies that have a desire to drive eating disorders, from what I can tell, that, she was only taking into account her exercise.

Right. And, for 130 pound female training, three hours a day, like you get to like numbers that feel like more normal for people. But if you don't take into account what she's doing outside of her training hours, you're massively underrepresenting what she needs. From a food volume perspective.

[00:14:49] **Dr Mike T Nelson:** Yeah, and that's, I've had similar stuff, I've told this on before, that even with like physique competitors, where you know like how much muscle mass they have. I remember like a natural physique competitor I worked with, she had a lot of muscle, but she was, just a smaller female. I think her stage weight was under 130.

Yep. She was still at like 250 grams of carbohydrates the week of her show. Absolutely. Like off season, easily three, four hundred. Yep. I'd like to have dudes. Doing the same thing, physique competition, natural guys, literally one guy, twice her size and his carbohydrates were less than her. Yeah. I'm looking at this and I'm like, this defies all logic, because you would think with that much more muscle mass and everything else.

But like you said, you have to take into account. Yes. Their baseline, maybe the old thrifty versus non thrifty metabolism, how much movement they do and all these other factors that really do make a huge

[00:15:44] **Dr Mike Molloy:** difference. It's a huge difference, right? And, all, even for physique, where I think a lot of it is much more controlled, have a really good sense of how much a person's burning from their training, and then you have a great, something like Alan Aragon's TDE equation or something along those lines where they start to take into account Your movement outside of the gym, but how aware is a person of their fidgety nature?

Like I wasn't aware of my, until I was doing a podcast with some people and I watched it back and I was like, I'm the only one that won't sit still on this camera. I'm like here, there I can't stop moving my feet. And it was like yeah, you're like, you're not aware of it, it's subconscious for a reason.

So how

[00:16:23] **Dr Mike T Nelson:** do you use then, do you use equations to try to predict calories with people? What is your, if you don't mind sharing some of your process with that? Because what I've noticed, and if I could give An equation that would be right, let's say 99 percent of the time for carbohydrates. Sure. I'd probably be kiteboarding off some private island somewhere else, right?

I get, and I've tried, like I've tried for God, 15 plus years now. And yeah, sometimes you'll hit it, but more often than not

[00:16:56] **Dr Mike Molloy:** I'm just wrong. Yeah, for sure. Yeah. So, of course the first thing is calculate total caloric needs, right? So to do that, I'll usually take their body weight, which is generally in the right range for where they want to be within the sport.

Although dysmorphia and, societal expectations can sometimes drive that number in the wrong direction. And then I'll just use a multiple, like a basic multiplier system, not so different from Alan Aragon's TDE equation. And so, on the lowest side of a CrossFit athlete, maybe two hours a day.

With, low to moderate levels of neat outside of training, I'll give them like a 16 or a 17 multiplier for three hours. We're looking at 18, 19, 4 hours, 2021. And then we, as we start to go up we'll go from there and I'll use that as a baseline. If I have no other information, Hey, you come to me, you've never tracked before in your entire life.

We have no caloric information. I'll use that as a baseline. I know a lot of people will go out there Oh, just have your people track food for two weeks or so. And there's nothing wrong with that approach, but I feel as though the simple act of starting to track changes behavior pretty dramatically.

Yeah, I'm not surprised you agree there. And so. It's a combination of both of those things. And then from there, though, it's yeah, we're, I'm chatting with my athletes two, three times a week to get a sense of, how does this, how do these numbers feel? Are you hungry? When are you hungry?

Are you never hungry? Are you hungry on your rest days? Right? Those things are really going to be important for me to generate total calories. And then from there, I like anywhere from 0.8 to 1 grams of protein per pound of desired body weight because I've, subtract those calories from the total.

I liked the fat at a bare minimum to be the same number. So let's say we have I don't know 150 pound female, it's bare minimum 600 calories of protein. I'd like to have at least 600 calories coming from fat, although I will often go higher. So track those out and then the rest essentially are carbohydrates.

So usually for the higher volume athletes training four plus hours a day, it's at least 50, if not 55 percent of their calories are coming from carbohydrates. Yeah. And then

[00:18:57] **Dr Mike T Nelson:** over the years, that's where I've ended up too. Like I'll use, 0.7 to 1 gram per pound of body weight. Fat, I tend to leave relatively fixed.

I'll start lower ish, 60, 85 grams per day, somewhere in there. Again, some people definitely go higher, filling the rest with carbohydrates. And, you're for most people, you're relatively close. The hard part is like we mentioned, what that amount of carbohydrates is

[00:19:21] **Dr Mike Molloy:** extremely variable. Yeah, it really does.

Like you're saying the protein and fat kind of. Similar ish ranges, sometimes more fat, sometimes less depending on how much volume, but that variability around the carbs is just something you've got to play with and get a sense of with your athlete, what they're going to respond to about the fun part is like when you get somebody and they feel like they're eating more, whether they are or aren't, but their performance is going up, they're leaning out.

And all of those things are happening at the same time. That's like the, where people are like, Oh my God, you're a magician. And I'm like, no, we're just actually eating in a way that supports your health, building muscle mass, supports, full blown thyroid function and everything else.

And now all these systems are coming back online. And yeah, you may be eating more, but you're also burning more as well. So guess what? You're going to keep eating even more than we just gave. That's the goal for me, and that's the fun part of the job.

[00:20:09] **Dr Mike T Nelson:** Yeah, I remember asking that to John Brardy years ago.

I had this skinny high school kid that looked like an eel shaped rake who just couldn't gain weight. And I kept just, I'm like, I don't know, man. I just started

giving him more and more calories. And I remember asking John, I said, hey man what do I do with this kid? And he's at some point, he will out eat his metabolism.

I was like, oh yeah, good point. He's it's not going to increase. Literally forever.

[00:20:34] **Dr Mike Molloy:** I was like, Oh no. Yeah. I've run into a couple of those high school boys myself where it's just are you sure that you're not doing more training, right? They're like, Nope. And I'm like, do you, do we need to attach like a pedometer to your wrist to see what's going on?

They're like, what is happening? Like, why are you burning so many calories? But eventually you do finally get past that that adaptive response to eating more food that, that increase in need that can exceed a thousand calories in some people, if not more than others, so yeah, for sure.

[00:21:01] **Dr Mike T Nelson:** Yeah, that's a Levine study. I know you talked about that, which is literally one of my most if I ever had to pick a favorite study, that's probably like top five. It's so cool. Do you want to talk a little bit about that? Just sure. I've seen what happens when you overfeed people calories. I've talked about this in the flex diet sir too, is because people, if you get them to buy into calories in calories out, which works, they just assume that if you just take in more calories that you just get fat.

[00:21:28] **Dr Mike Molloy:** Yeah, exactly. There's I think that people miss that there's like a very fluid In a reaction or interaction, excuse me, between calories in and calories out that most people don't recognize and it goes in both directions, right? So if you increase calories in, in a demographic of people, they're going to increase calories out subconsciously.

And as a good example, I recognize in myself that if I sit down and eat. three doughnuts, I will naturally start to bounce my leg without even paying any attention to it. And I'll do that for hours and like hours afterwards, and unfortunately, not everybody does this, but it seems to be a mechanism that prevents.

Weight gain in some individuals, somewhere in that, like what, 40 percent or population or so maybe a bit less on the flip side, if you restrict calories, people obviously assume, well, I'm just going to lose weight, forever. And it's well, no there's a compensatory mechanism in that direction as well, which is your body doesn't like this.

And it's got a couple of, tens of hundreds of thousands of years of evolution baked in there. Designed to prevent you from starving to death. And so, one of two things is going to happen. You're either going to have a crazy desire or drive to go eat, or you're going to move less. Both of those things will ultimately move you out of that calorie deficit that you're trying so hard to generate in the first place.

And then the last situation is some people will say, well, okay, I'll just go exercise the hell out of myself. And this will, solve the problem. And. It's not a perfect model, and there's definitely some evidence against it, but at least to an extent of maybe several hundred calories, if I go walk 15 miles today or run 15 miles, I will probably plant my ass on the couch and not move for the next eight hours unless I absolutely have to.

And so this massive deficit that I thought I created is going to get smaller than I think it is, and yes, you can absolutely overcome that. There's some studies that have been done that have shown that quite nicely, that Yeah, you'll easily adapt against maybe, I don't know, we'll say an hour's worth of exercise and a caloric deficit.

But if you go and do two or more hours, like there's a limit to how much your body can adapt. And eventually you will surpass that. So it's just, it's not simple arithmetic. It's really more of this calculus for lack of a better term that ultimately determines energy balance, yeah,

[00:23:48] **Dr Mike T Nelson:** I think the hard part about that too is that we're just With technology, I think we've gotten a lot better at measuring calories in and logging everything and assuming people are accurate all that stuff but on the calories outside of the equation for Known activities. They're pretty damn good if you're running it's got a gps and heart rate like it's pretty good or you're biking Pretty good, but crossfit Who knows like most of your other stuff like most of the activities you're probably doing.

Yes It's gotten a lot better, but I would say it's still, at least in my experience, the wearables are far enough off the total daily energy expenditure that unless I'm putting the fudge factor on it where I can adjust it, it does appear to be relatively consistent. But the sheer number I find just is not super accurate.

[00:24:38] **Dr Mike Molloy:** No, I think if most people were to go off of what their wearables say, they should eat, they'd gain a substantial amount of weight. Yes. Exist in the cardiovascular or more that, longer time domain. And on the, if they were just a weightlifter, then you'd under eat ironically, so, yeah, they just

don't, they don't like, even the really good ones out there, they don't even pick up if you're doing a set of five back squats, right.

But I walk up a flight of stairs and it's are you okay? And I'm like, calm down, yelling at me, so I think they're tools to be used, but within the space of CrossFit, ironically, I think there are. Less useful than most other training methodologies that are out there, and yet people become very emotionally attached to the whole dress.

If you ask them to remove them. So,

[00:25:19] **Dr Mike T Nelson:** yeah, if I could pick 1 thing that people did never look at on their wearable again, would be the calories burned. Yeah, I just don't. Like you said, it's so intricated to calories in, calories out, what you're doing. Yep. Your watch is just, it's just looking at movement patterns and it's based it off a chart, so it's trying to estimate where you're at.

Exactly. But like we just talked about, there's so much variability in that. So if I'm sitting here and I'm like tapping my leg the whole time, my watch isn't picking that up. It doesn't know I'm tapping my leg, so there's just a lot of inaccuracies just, that's just the way the system currently is.

[00:25:58] **Dr Mike Molloy:** Agreed. Completely agreed. Yeah, for sure. Do you find

[00:26:01] **Dr Mike T Nelson:** sometimes that it can be detrimental because people, some athletes really like certain numbers as like their teddy bear and their thing, but you also know as a coach, it might be the thing that's holding them back at the same

[00:26:15] **Dr Mike Molloy:** time.

I definitely, so not to pick on Whoop, but the strange Oh, I pick on them all the time. They don't like me. Screen calculator that comes out of Whoop. The worst thing that ever happened to performance based athletes because it was really biased towards cardiovascular dominated workouts, so endurance style training, right?

Because it was easier to calculate. Yes, substantially, right? Yeah. So, I had these athletes that don't, that won't eat unless they hit like a certain strain score, right? Oh, no. It's like, what are you doing? Right? But the watch doesn't work out as much. I'm like, the watch is wrong. Like it's just wrong.

Like I can prove it to you, but you're not, you don't have the attention span to listen to me. So but like seriously, so yeah, I hate some of those metrics that come out there. The calorie output for sure. The strain, all of those things are problematic. I. This is deviating a little bit, but I won't let my athletes, as long as they're listening to me, wear them during competitions because Oh God no, calm, right?

Like your sympathetic nervous system goes into hyperdrive. Your HRV and your RHR are going to like head in the wrong direction from where we want them to be. And now you wake up on the day of a competition and you're Like your little watch is telling me, they're telling you that you've got you're in the red and you're not primed to perform.

Well, how do you respond to that as an athlete? The vast majority of us are going to listen to it and at least on some subconscious level and have it impact our performance, and so I really think that athletes should be taking those things off the week before bare minimum to avoid all of that nonsense.

That's going to come as you move into a higher stress competition,

[00:27:47] **Dr Mike T Nelson:** yeah, it's the same thing I tell people because I get lots of, we'll say, interesting emails about heart rate variability and about, oh, but if it's red, what if it's a competition? I'm like, well, one, if I'm using it, I should have prepared the athlete for this ahead of time, right?

I don't even have some athletes like if their HRV, average is good and an acute day, their score is bad. I'd like. I may have him go train and do some low volume, high intensity stuff. Hey, look, you hit a PR. Great. We're not going to do that every day. But just because your score is bad, it's not always bad for performance.

No. And then one of the best quotes I ever heard on this was from Rich Froning, he's in training, you should listen to your body. In competition, I tell my body to

[00:28:30] **Dr Mike Molloy:** shut up. Yeah. I was like, that's so perfect. Yeah. A hundred percent. A hundred percent. Exactly. I completely agree. Yeah.

HRV, I think is a really interesting metric. More about it than I do, but in general, when athletes do ask me about it, my, my general response is I try to ignore single day data. For any, for any lack of better usage and mostly focus on larger trends, right? For women with an accident cycle, we're going to have

some data there that's going to consistently every month cause problems on the HRV score.

But, if your training is, been harder and your coach has already pre programmed this in and your HRV is dipping, that's not problematic necessarily. It may just be. The stimulus that we're looking for as you move into a deload period to get the compensation effect that we're after in the first place, right?

So, yeah, but people tend to look at those data and say, oh, I can't train today or I shouldn't train today. And it's well, no, it's more complicated than that,

[00:29:19] **Dr Mike T Nelson:** yeah, and that's what's, at least with HRV has been the bane of my existence because it's not, and then people want to blame the device, and there are some devices that do HRV absolutely horribly, so there is some definite truth to that, but even if you get an accurate measurement, my little air quotes golden rule is that if you get an HRV measurement and it is accurate, it is only telling you the status of your autonomic nervous system at the time of measurement.

Right. That's all I was telling you is the little guy doesn't pop up out of your phone and put shackles on you until you can't train today completely. If you did it at a different time, you were dehydrated, whatever. Yep. But if athletes can just remember that and put it into context, they're usually okay.

But again, some coaches have done. Help with that. Some of them said, don't wear it at all. And then, you might get some of these athletes too. I get the ones that are just completely burnt out because they could drive themselves so hard and there was nothing to pull them back.

Yeah. So they ended up on my doorstep and they're going, I don't know why I'm so fucked up,

[00:30:18] **Dr Mike Molloy:** Yeah. It's it's become, there's obviously been an issue for a long time, but I saw it interestingly, during the qualification and at the CrossFit Games last year, not necessarily like some of my athletes, but other people that I've worked with in the past are just casually as a fan watch where it's interesting.

You hear the term I just couldn't find that fifth gear, right? Yeah. It's well, that I know what's happened. Right. And they may have. A great coach that has programmed for other athletes very successfully because they have a very high

communication relationship and that athlete comes to them and says, yo I feel like shit.

I haven't slept well for a week. My sex hormones are in the trash based upon my drive and everything. And the coach is like, all right, great. Like what's the deal out now, as opposed to 10 days from now and let's make some adjustments and you have other athletes. Who are just, to use some of Brett Bartholomew's work, they're like that soldier, right?

And you tell them what to do, they're going to do it. You say I hit a hundred percent effort on the assault bike for 12 sets of whatever do it, even if it puts them into the hospital. Right. Yeah. And that's not probably what that coach wants. That coach wants some level of feedback and adjustment to prevent that from happening.

That's where the art, like his book's title, that's where the art of coaching comes into play, right? Of how do you communicate to your athletes, as a nutrition coach or a programmer, what you're really looking for and making sure that they get that message such that they can go out and perform at the highest level when they need to, yeah, and that's

[00:31:47] **Dr Mike T Nelson:** where with the hiring an athlete, that's primarily what I like about HRV is I can show them a metric and be like, Hey, Bob. Your HRV has been in the it's like going off the cliff because at some level, they almost like the little soldier athlete, they feel bad that they couldn't get the level of performance and that they couldn't hold up.

It's no you were in the red for three days in a row. Like you, you need to hold back. It's not a nothing against you personally. You're not a bad human being. You didn't do anything wrong. At least if I could show them data of saying, this is from your physiology is telling us that.

You are almost at max and then they're Oh, okay. So I'm not just a big pussy. It's no, this is your system. And then once they get through a few of those cycles, they're Oh, I got, Oh yeah.

[00:32:34] **Dr Mike Molloy:** Okay, cool. Totally. Totally. For sure. I think it's interesting. I don't know. I often try to help connect it to like mental health.

And that's not a world where there's a shitload of data or anything, but so much of it is I feel more emotional, like an athlete, a lot of athletes, especially on the female side of things, but I'm crying at my workouts and I'm like, yeah, this is a

sign, right? This is the connection between your physical health and your emotional and your mental health.

And we need to take all of this into consideration and be smart about your training and things like that. And so, some of it is the hard data. Some of it is just listening and helping an athlete understand like what some of those cues are, right. And having all of these tools in your toolbox to educate them.

Some athletes are really hyperintelligent and I can go and show them what was it that cell metabolism paper where they, gave people absolutely stupid levels of high intensity interval training that they had no business doing and sure enough, like their mitochondrial function went to garbage and their performance tanked for, and then, came back a week later after deload and crushed it and other athletes, if I try to explain that to them, like they're in Lalo and they're not paying attention, but I can.

Yeah. Say Hey, if you feel more emotional in your training, that's a sign that we probably need to go talk to coach about this, and so having all of these tools in the toolbox, I think is ultimately what we need to, because there's so many different athletes out there,

[00:33:44] **Dr Mike T Nelson:** yeah, that's some of, Andrew Fry's old work from the 90s, Sean, where he had, I think, Olympic weightlifters go in and, do like multiple one rms for two weeks in a row. And he didn't really show, they didn't look at HRV as far as I know, but they didn't see a huge change in metrics. But like you said, Mood and then performance, like I think mood dysregulation was like one of the first thing that came up, willingness to train.

It's man, I just don't want to train today at all, and then performance is falling off because of speed and power. And yeah, but having athletes know that I think is useful. And that's, again, that's the art of coaching, building up trust with them to say, Hey, again, you're not a bad person.

This thing's happened. Hey, maybe, I'll even take the blame. Maybe I pushed it a little bit too hard, maybe restricted your calories a little bit too much. I apologize, but we're gonna fix it because we went this direction, that direction didn't work, so now I know this other direction is gonna be better.

And, it's just a,

[00:34:39] **Dr Mike Molloy:** it's a process, I love with athletes, the idea of like radical accountability as like a coach, right? If things are going shit, it's my

fault, when things go well, it's your win, so that's a great strategy, I love that, for sure. So how do

[00:34:50] **Dr Mike T Nelson:** you build up that trust because especially, and I don't want to pin this all on female athletes because I've had male athletes do the exact same thing, calling them like, Hey, you need to eat more carbohydrates.

For a lot of them is freaky, especially, when body compositions, relative strength of power, all that stuff is a thing of their

[00:35:09] **Dr Mike Molloy:** sport. Totally. Totally. For sure. It's hard. Yeah. There's no doubt about that. It's obviously easy. If you have like that Christie or Ramos story I told you earlier, where it's like, Oh, we ate more and we got leaner, stronger, fitter, slept better and had better mood.

Right. It's harder, going all the way back to my very first, high profile athletes, somebody like Tasia Persevich. Who as we ate more did not necessarily lean out just built like insanely large muscles that on some level made her feel really uncomfortable, right? Her arms were freaking huge and it wasn't due to anything other than her genetics and the fact that she was training four to five hours a day, right?

Yeah. When we were fueling her appropriately. So, that's a harder, that's a harder one to sell, and it takes time. It's a lot of repetitive conversations. It's a lot of, for me, asking questions around what are goals? Why are you doing this? What, what do you want out of this year?

What do you want out of the season? If you were to go back, if you were to tell somebody else what they should be focusing on, what would that look like? The. Things that are, what is it very just much about like self appreciation for what you do have. Right? Can you find three things that that you love about yourself?

Right? Although I have had that backfire. I will not use their name. Yeah. I literally had somebody who is, we'll say amongst the fittest people on the planet. And I worked with them unable to tell me three things that they were. That they loved it. Oh, I literally couldn't find them, and that's first off heartbreaking.

Yeah. Yeah. You, as a coach you're trying to bring positivity to a situation and unfortunately backfires on you. So you gotta be, I had to be better in that

situation and recognize that maybe that wasn't the best question to ask that person, those are the types of approaches.

And then just a lot of listening, early in my career. When people didn't necessarily know who I was from a nutrition coach in the CrossFit space perspective I checked in on my athletes like all the time, right? Like I was an open phone for lack of a better word for it of communication.

They can message me anytime. I would message them three, four, five times a week, just seeing how they were doing, listening to them and not necessarily always trying to solve the problem. Sometimes just. Saying, hey, that sucks. That's really hard. I, that's a, I think, it's a stereotypical male, female thing where men try to solve problems.

Women, want to just be heard. I definitely am a ball that other kids with my kids where I'm like. I just want somebody to tell me that it's hard and not try to fix it. So I'm not male, female, but it's stereotyped that way. But yeah, a lot of times it's just being like, Hey, you know what?

It does suck that the fact that even though you've dialed in your sleep and you're eating really well. And your training is going well that you're not generating the same physique as whoever, I get it. That's hard. I'm sorry, and not trying to solve that. That's sometimes that's all they want to hear, yeah, and

[00:37:58] **Dr Mike T Nelson:** that's a skill that took me God too long to learn one.

I learned it primarily from my wife because she would beat me over the head with big signs and be like, I don't want you to solve it. I just want you to listen. And I'm like, As a stereotypical male engineer. I'm like, but must solve problem. I get paid to solve problems, must solve problem. No.

But also my friend, Dr. Lisa Lewis was telling me that too, on the psychology side is it's not necessarily your job as a coach to always take away their pain. That might be a motivator or a thing for them to change and do something different. And plus. You didn't really cause it. It's not your responsibility by all means, listen, by all means, try to be useful, be helpful, that type of thing.

But, I know where early on I would hear someone have a difficult circumstance and I felt obligated that I should solve it and remove that from them, which is not

[00:38:54] **Dr Mike Molloy:** the best idea. No, sometimes it's just, I don't know if it's sympathy or empathy, but that's really just what they need in that moment, yeah. Yeah. Yeah.

[00:39:03] **Dr Mike T Nelson:** What do you do in the cases where, like you said, it's hard because there is so much variability. Like I've worked with a fair amount of female athletes where, yeah, we did get them, eating 300 grams more carbohydrates and they ate more calories. They felt better. Their energy availability went up.

They actually got leaner because they're doing more work. They're doing more high quality work. Their sleep went up. But like you said, I've also had other athletes where. It didn't necessarily happen either. And it's so, I was talking to my buddy Ben House about this a while ago, and it's the longer I think you work with people, the more appreciation you have for just the massive variability from one person to the next.

And especially when you start working with high end athletes and outliers and freaks, like how. How far away they are from the actual norm. It's it's mind blowing. So therefore, your ability to predict stuff, I think, just goes in the

[00:39:58] **Dr Mike Molloy:** shitter. Yeah, completely. Completely agree. Yeah, I think in those situations where things don't necessarily go the way that we expect honestly, from the start maybe this is just a me thing, but My baseline expectation while I'm giving somebody something is that they're not going to go the way I expect and then I'm happy when they do, maybe you're the same way, but it's always like when somebody's eating more and I'm meeting out and I'm like, Oh, that's amazing.

Great. I was prepared for the alternative in the back of my mind, plan for the worst hope for the best. In those situations, I think first is just literally like trying to literally make sure that things are being done the way that we want them to. Right. So. Are we accurately tracking how much guesstimating is going on, trying to create a safe place of listen, I'm not ever going to be mad at you.

If these things are not being done, you'd like, just tell me openly and honestly, because if you say this is a 10 importance goal for you, but your actions indicate it's like a six or a seven. then I can help you, right? I can help you or I can go get a mental, performance specialist that will, right?

But if you never tell me these things, then it's hard for me to fix them. So first it's just trying to create that safe space of this is a judgment free zone. I don't care if you told me That you didn't eat at all this weekend, or you went out and ate four pizzas this weekend. I will have zero emotional response to it, that's step one. Let's say all those things are still going in the right direction. I will often, look to see if there is some sort of weird physiological issue that I'm missing, I'm not big on running tons of tests. But let's make sure that you don't have you know, some sort of weird hypothyroidism or something like that going on.

Let's just make it simple. There's a wire. Yeah. Right. I aren't guys hypothyroidism PCOS, right? Let's be clear with the, androgen increases that we see with PCOS in a sport like CrossFit, it wouldn't be necessarily surprising to see a strong demographic overlap of. Of women that have that, and there's this again, they're not going to be the overweight PCOS individual, but there's aspects of that, that we can think about I'm not going to all of a sudden do something to someone who has PCOS and make them go into 12 percent Tiatumi land of performance and aesthetics.

That's not what's going to happen, but maybe we can move the needle a little bit, those are really my first steps. And then like we said, to some extent, it's having that individual understand that despite what you might think based upon social media. And yes, at the highest level of the sport now in 2024, those athletes are going to both be, they're gonna have an amount of food that allows for Max performance and elite level of aesthetics for most of them, right?

Not all of them, like the, I would say there's a couple athletes at the highest level in the sport that are not the most aesthetically whatever, whereas five years ago or even just maybe going from like that 0. 01 percent to the 1 percent level where there's just as many athletes that are super, super fricking fit that don't have 18 apps.

And you're just aware of all of the other ones due to the fact of that's how social media and marketing works, right? Like those individuals are put onto your radar much more so than they would have been. In the absence of those sponsorships and things, it's like I like to use a demographic or an image where I show like, Hey, this is the amount of food that you need to eat for elite performance.

This is the amount of food that you need to eat for elite aesthetics. And there are these individuals that sit right here in the middle that somehow get to do both.

And it's completely out of my ability to control if you're one of those people or not, for the most part, no,

[00:43:26] **Dr MIke T Nelson:** totally.

Cause you're, at the, I think again, it's hard for even. High level athletes to appreciate how freaky some of the freaks actually are, and it just, and a lot of times it's not anything I've done. I haven't done anything magical. There's no, nothing crazy. It's just, wow. That individual just for whatever reason, I was talking to my buddy Cal Dietz about this the other day.

There are just some individuals, he was talking about one of his top female athletes and He's I've never really coached her. He's I watch her to get coaching ideas of what to, how to coach these other athletes because she is that phenomenal, and he's I get tons of ideas to help other athletes.

But he's I actually stopped coaching her because for whatever reason, 99 percent of the time she's doing it correct. And if she's doing something different, he's I at least now I've learned. Okay, why is she doing that? And let's measure it. Oh, it is better. Okay. So, but yeah, if you were to ask her she doesn't even know what

[00:44:28] **Dr MIke Molloy:** she's doing.

She's just able. Yeah, they're just able to do it. Right. Yeah. It's a great example. So if I were to take my top athletes, right. So, I've worked with Emma Lawson since she was like 15 years old. Right. And yes, 100 percent she's eating more as a result of working with me, not because of me.

If she'd gone to someone or someone else, they would have said the same thing and she'd be eating more. But it's if I were to take that same 4000 calorie diet and give it to another individual who literally would could be training with Emma and follow her around all day, we're not going to produce the same result.

Right, right. Not aesthetically, not recovery, not body comp, like weight gain or lack thereof, it's not going to happen. Right. It's so it's is it, am I responsible for that or did I just happen to give the best plan for that time for that individual and it's really, a small piece of their overall just genetic and I don't know I know it's epidemiological, but there's their social city set settings and everything else really driving the success, like I can tell you, I've given similar plans to other athletes and they haven't had second place CrossFit games finish, nevermind

qualified for semi finals, there's just some aspect of it of at this point with how far these sports have progressed, where it's out of our ability to control, so

[00:45:44] **Dr MIke T Nelson:** yeah, and that's how I emphasize it to athletes too.

It's okay we're gonna do everything we can to put you in the best position you can. And, talk to other coaches, if something's not working, we'll keep, trying to figure stuff out. And wherever you end up is wherever you end up, right? And it's a weird thing to be responsible, in air quotes, for their output and yet not.

Right? Because that, even like with body comp changes, I've made the same argument with other people that no matter, an example I use all the time is Oprah. Like Oprah has a very public, weight's been up, weight's been down. She's a very public figure. It's easy to see. She's been in the spotlight for decades.

And in theory, she could hire a personal trainer. She could hire a chef. She could hire anyone she wants. But she still has to do the work. She still has to put in the reps. She still has to get the food. So even at the highest level of trying to outsource stuff there's things you just can't outsource.

And at some point, with athletes, you can do everything you can to the best of your ability. Their other coaches ability and at that point, whatever their output is what their output is,

[00:46:51] **Dr MIke Molloy:** Yeah, I think that's a great perspective, like flipping away from performance perspective, thinking about aesthetics, where, you could take two athletes.

I've taken two athletes where we want to produce a leaner physique and we put them into caloric deficits. And one will lose a female menstrual cycle and one doesn't. And it's what are you supposed to do in that situation, right? There are clear detriments to the lack of those hormones, but why does one person have this tiny, minuscule room for error where, yeah, they can lose weight, but they're going to have consequences as a result of it.

Other one, I can Like slashing, all I want and their body is like perfectly happy and fine to live in this calorie deficit state. Am I doing anything differently for either of those two individuals? No. Are they doing anything differently? I like I will say a macro level no pun intended. No, it's just their scenario, right?

Yeah, they could maybe try to manage stress or. Who knows? Maybe there's some aspect from previous parts of their life of trauma that's involved. I don't know. But we're not going to change those things. Not you and me, no offense to either. Yeah.

[00:47:49] **Dr Mike T Nelson:** No, totally. Yeah. You look at the data on like the, from the heritage trial, like the heritability of VO2 max.

Yep. It's massive. It's essentially 50 to 80 percent depending on what you read, who you believe, whatever. Huge. But it's also, there's some studies looking at that of how genetics determine how you're responding to training. And my interpretation, I don't know if you would agree, is that up until a certain point, like almost everyone is extremely trainable.

Most people, in my opinion, should hit, 50s, maybe even mid 50s, VO2 max. Some people, that's going to take you years of effort to get there, maybe longer, completely doable, but they hit 70. Yeah, I don't think I could, even if I wanted to be an endurance athlete and started training them in 20, I don't think my VO2 max would ever hit 70.

I think there's just some things that are fixed. But then again, you look at elite level athletes. There's people who have won major endurance competitions with a vo2 max less than 72 Right, that's also not the be all end all of

[00:48:50] **Dr Mike Molloy:** everything either completely Yeah, I don't know exactly where the research is gonna go on this I you know, so I have a background in gut biology and things like that.

I read about the In the presence of certain bacteria that process lactate and generate, short chain fatty acids, right. And it's probably not, it's probably not, it's cool. And it gets me all jazzed up and things of that nature. But there's just so many variables that we probably still haven't even considered outside of, genetics, epigenetics and things of that nature that are at play.

And again, how many of those are we going to actually be able to control? It's probably fewer than we want, especially when working with people that are trying to be the best in the world at something. Yeah.

[00:49:29] **Dr Mike T Nelson:** One last question, just wrap up here on a practical side how do you get someone to eat 500 grams of carbohydrates a day?

And at what point do you toss nutrient density out the window almost? Because I remember, I won't say the athlete's name, because I don't have his permission, but years ago, Yep. Working with title athlete who is training three sessions a day. Probably two sessions a day was an easy day high level competitor.

And I posted a picture in the evening of him eating two donuts, put it on the internet. Didn't think anything of it. Oh my God. The amount of backlash I got from that was insane. And I'm like trying to explain to him, like this dude's eating 3, 600 calories of. Paleo is fuck nutrition during the day and if he doesn't hit at least 4, 500 calories like his training Drops and he likes doughnuts.

So we have him eat a couple of doughnuts at the end of the day, but it was like Mind blowing to

[00:50:23] **Dr Mike Molloy:** People get really mad when? Aesthetically pleasing individuals eat foods that yes It's you know Yeah, I don't know. It's not super surprising to me. But yeah It's up anyways, so how do I deal with it?

so, you know for me that baseline as I work with that beats I have these I expanding box model where, let's just take somebody who's only training an hour only who's training an hour a day. That person can probably meet all of their caloric needs with 85 percent micronutrient dense foods and 15 percent fun stuff to keep it sustainable and make it make life enjoyable.

As we start to move to two hours of training, then we really want to work in some more easy to digest, but not hyper palatable. Carbohydrates. So a lot of rice, oatmeals. I have no problem with bread at this point in my life. Dried fruits, calorically dense things of that nature.

When we start to get to three to four hours of training, then we, I would argue that we need the hyper palatable type of foods to surpass our natural satiety cues when we're training four hours a day. The act of training four hours a day is going to suppress your appetite. And I see this manifested with clients where.

Their rest day comes and they're rabbits, right? Oh, yeah. Finally done training, their parasympathetic nervous system kicks on. They've probably unintentionally been in a deficit for the last three days of training. And so they're super hungry. And so ironically, a lot of my athletes will eat more food on their rest days when there's more time to eat and their body is better at digestion.

So you know, that's at that point I am often suggesting carbohydrate powders and things of that nature to help get them into those at that point, probably like 400, 450. Range of carbs once we go beyond that, if we're into like five to six hours a day of training, really at that point, well, let me back up for a second with a four hour training athlete.

I still want them working in micronutrient dense foods away from their training blocks. So we finished training at four o'clock by dinnertime. Yeah, you can absolutely handle, salad, fruits, veggies, all that stuff. Once we get to five to six hours of training a day. Like I, I am intentionally pulling those things out of their daily diet and moving them to recovery and rest days.

Because again, like they're not going to train that volume all year long, or at least they shouldn't be, right? I don't, yeah. These are like set blocks leading into competitions where you're peaking. So the rest of the year, they're eating micronutrient foods. They're not going to become depleted for the most part in a short time period of less consumption of these foods.

And here's why. Reason one is just simple density, right? To get 600, 700, 800 grams of carbs in per day even a sweet potato is going to become problematic. Oh, yeah. Nevermind broccoli. You know how many

[00:53:18] **Dr Mike T Nelson:** sweet potatoes you need to do that? Dude, it's crazy.

[00:53:22] **Dr Mike Molloy:** Oh, yeah. But even a couple of them, right?

It's they just sit there, and they take way longer to digest than a bagel does, mal O'Brien. I worked with her for a while. We, as she was leading into her second place finish year at the games three plus bagels a day, right? Just, she loved them. They were easy to eat.

Hyper palatable. Super dense source of calories. Awesome. Crush them. The other reason beyond just caloric density that we need is there are some athletes that I've found where the consumption of like specifically cruciferous vegetables underneath the high volume and high intensity of training was causing gastrointestinal issues.

Oh yeah. It's back to the sympathetic activation of the nervous system. That's a huge connection to the gut via the vagal nerve. Basically, what happens is it gets this. Thing that's going to require like what forever, essentially to digest the body is in a fight or flight state. It's not really interested in digesting it.

And so it just pushes the evac button. What's a bunch of water into their intestine and they get diarrhea. Right. And so how many athletes, I don't know, maybe a couple of dozen where I've been like, eat less vegetables. And sure enough, all of their GI issues go away, and so it's again, that's an individual perspective or individual specific thing, but it's just one more reason for me to say, look, I'm not anti vegetables.

I'm not gonna be some carnivore diet. Looney tune over here, but if your goal is elite performance and we're training with crazy high volume, quality is not the priority. It's not where you can hit those needs on your day. When you do a one hour swim and then sit on your butt, we can hit that on your rest day and put a ton of quality in that.

And those days and then when we're in our off season, yeah, you better be eating a high quality diet to build up your micronutrient reservoirs for when we have to go into these phases, so that's just generally how I approach it. Yeah. And I

[00:55:20] **Dr Mike T Nelson:** think also, like you said, emphasizing to the athlete in the general public that.

Being an elite level competitor in anything is not super healthy. There's a point where exercise is beneficial. Well, 1, 000%. But if you're playing in the NFL and you're going to run full speed into another human being for, 18, 17 weeks in a row, or you're a top CrossFit athlete and do high output, crazy ass exercise for three days in a row.

That's not healthy. And that's fine. That's

[00:55:50] **Dr Mike Molloy:** not the point. No, it's not. And I think sometimes it's hard for athletes to hear that because they're like, oh, fitness equals health. And I'm like, no, not even remotely true. Right. In the case of the NFL, like you're sacrificing your health for cool experiences and millions of dollars, right?

In the case of CrossFit, we don't really have the millions of dollars thing, but there's, I don't know, some addictive benefit that people seem to get from it. And so, we're chasing not health. We're chasing. You've gone beyond that spectrum of health. We're pushing the point where the more you do, the less healthy you feel.

Even if your fitness level is crazy, I gave it a couple of lectures a year at the power monkey fitness camps down in Tennessee and there's always elite

athletes down there that they bring in. And I always ask them, I'm like, Hey, at the games last year, when you were going into that, you feel, and they're all like, bro no, I don't feel healthy at all.

I can talk to Alex Kazan about that. All of them. And yeah, no, they're not healthy at that point. They're just freakishly fit, freakishly fit. So I think it's an important thing for most people to recognize is that like you can post a couple of pictures of your donut when you're training that volume and you need caloric density.

And there's nothing wrong with it because it is absolutely in alignment with their goals. But just because they're doing it doesn't mean that I'm recommending you do it, I'll eat, I'll sit down and eat three donuts with anybody any day of the week. But I'm not saying it's a good idea for your aesthetic or health based goals.

[00:57:10] **Dr Mike T Nelson:** Oh, totally. And then, sometimes after my clients, I'm like You're not exercising three hours a day. And if you got to the point where you were doing three hours of exercise a day, I guarantee you're not doing it at that level. You're not doing it at that power output. You're not moving those kind of loads.

You're just not. And that's okay. You're not a bad human being. There's nothing wrong with that. It's just you can't then feel bad that you're not able to do that also. Because you're just not at that

[00:57:36] **Dr Mike Molloy:** output. Yeah, that's the reality. Yeah. That's another hard thing. Right. So you take these athletes that have been training since they're 10 years old and you're like, why don't like, why do they eat more than you were training the same amount?

I'm like, well, they have a higher fitness level than you like. What are your watts when you're on the assault bike or the biker, they'll tell me, and I'm like, yeah, that's 65 percent of what they're doing while still hanging in zone 2, right? And it's I can't hold those paces, and so it's just, and it's casual for them. I'll never forget, I was working out at this gym up in New Hampshire when we were still living up in the Dartmouth area. This elite team guy came in from Europe and he was there for four months and we were doing an assault bike workout and he was like casually holding like a 1200 calorie an hour pace while talking to me about what he was doing.

Right. And it's just I'm over there just getting crushed at I don't know, 960 or something. And, it's just a different physiology. Like their output is just. Radically different. Never mind how they train. Right. Ironically, like if you go into the gym and do two hours of CrossFit, like that's not what Emma Lawson does.

That's not what Noah and those guys are doing. They're doing a lot of strength work and then they're going really long, like 60, 90 minutes, multiple times per week. And they're building that bigger, big aerobic base that, most of us just don't have, so like their caloric outputs are different as a result of that training as well.

Yeah,

[00:58:59] **Dr Mike T Nelson:** and that's why I like using the bike or especially the rower because you it clearly identifies like you said their output, right? So I'm like, okay, if you can get on the concept too, and show me you can at least go sub 7 2k Let's get to six and a half minutes, six, 20, six, 15, and I think for people who haven't done some of that, they're like, Oh, well, if I had seven, six 30, it shouldn't be that hard.

I'm like, seven and six 30 might as well be two different freaking universes for most years

[00:59:30] **Dr Mike Molloy:** away from that unless you're a freak and I've never trained before. You're a couple of years away from that. For sure. I actually like those pieces of equipment as well, because on the flip side, great justify. Why somebody needs to eat as much food as they are.

So let's say somebody starts to get into that competitive world, but now they are trying to build that aerobic base. And they're like, yeah, I did an hour of zone to work, but like I was barely sweating the entire time. And I'm like, okay, let's just do some math. If you were on that bike for 45 minutes were you holding a 750 calorie pace per hour?

And I'm like, okay, so that one training session alone burned 550 ish calories for you. And then you went and did three hours more of work that day, right? So you've got a basal metabolic rate of 1500 calories. We can already add, we'll say 550 being hyper conservative to that number before you did anything else the rest of that day, thermic effective food or what you did when you weren't training.

I think we need to eat more food. So sometimes that Actually, the flip side can be beneficial from a coaching perspective of helping somebody understand that they do need to eat more food.

[01:00:33] **Dr MIke T Nelson:** Yeah. That's great. Awesome. Yeah, well, thank you so much for all your time here. I really appreciate it.

Thanks for having me. Where can people find out more about you? I know you've got a lot of great stuff.

[01:00:43] **Dr MIke Molloy:** Yeah. So, just our Instagram account is probably the best place to get information about what we do and our philosophy. So at m2performancenutrition.com. We have some very low cost of entry educational content for just monthly digests and things.

If you really want to dive deeper into this stuff, but you got the pro on the screen with me there already. So you're covered on that front. But yeah, come check us out.

[01:01:04] **Dr MIke T Nelson:** Awesome. Well, thank you so much. I really appreciate all your time and especially all the. for all the work you've done over the years and especially for just so freely sharing all your knowledge too, because as after you've been in it for a long time, it's one thing to know what to do, but it's a whole nother thing to make all the pieces work together.

So, but thank you for all that.

[01:01:23] **Dr MIke Molloy:** Thank you for having

[01:01:23] **Dr MIke T Nelson:** me. Yeah, no problem.

[01:01:25] **Dr MIke T Nelson:** Thank you so much for listening to the podcast, a huge thanks to Dr. Mike for doing this interview really appreciate it. This was such a fun conversation. And like I said, in the intro, I love that he was able to not only has the background of doing this for many years, able to use specific case studies so that you can follow these athletes and look and see what they're doing.

A lot of times I think there's some misconceptions that, oh wow, they're performing well and they're very lean so they must be on a low carbohydrate

diet. And as you realize by listening to this interview, that is not the case. Again, there's a time and a place for using a potentially lower carbohydrate approach or even a ketogenic diet.

But if your goal is high level output, especially through a sport that's extremely glycolytic, like CrossFit, Eee, that's not gonna go very well. So, huge thanks to him, make sure you check out all of his stuff, he's got really great stuff, awesome information. As we mentioned in the intro, this is an excerpt from the Flex Diet Certification under the Carbohydrate section I'm always updating and changing things, reviewing the literature, going back to the certification again to see if there's changes and tweaks that we need to make.

That's actually why we host it on a specific site that is a learning environment so that when you get one login you will have all the information. Whenever you go to that login it is already updated. There's no need to look for multiple emails or updates. Once in a while I will send you an email update of things that are new, but you can just go into one location and know that it is the most current and updated form as it is there.

Always making tweaks, making sure everything that I said, even a couple of years ago is still valid. If you're interested in it, the FluxDiet cert opens again in June, 2024. We'll have a link to the wait list. You can go below also put you on the daily newsletter. We have lots more free information delivered right to your inbox.

And if you're looking for a great electrolyte supplement, check out Element, go to drinkelement.com forward slash Mike Nelson, we'll have a link below. By far and away, my favorite electrolyte supplement. I'm using a fair amount of it now in South Padre, Texas here, where it is a quite a bit warmer than Minnesota.

Although Minnesota was record heat the other day. So check that out below. Huge. Thanks for listening to the podcast. Really appreciate it. If you have time hit the and subscribe button or download. It goes a long way to help us with the old algorithms for better distribution, which then allows us to get.

Different guests onto the podcast much easier. Thank you so much. Really appreciate it. And we will talk to all of you next week.

That was wonderful! Bravo! How was great! Well, it was pretty good. Well, it wasn't bad. Well, there were parts of it that weren't very good, though. It could have been a lot better. I didn't really like it. It was pretty terrible. It was bad! It was awful! It was terrible! Get him away from me!

[01:04:35] **Nancy:** 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.

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