

Advanced Recovery Techniques

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SPEAKERS

Michael Nelson



Michael Nelson 00:01

Hey, what's going on? Welcome to the flex dyad podcast. Today, it's just me, and I've got a short blurb that I talk about recovery methods. And when you should do specific things for recovery, and when not to do specific things for recovery. So I like using heart rate variability to determine should you be doing recovery things that are more parasympathetic? Or should you be doing recovery methods that are more sympathetic? Now, the caveat here, before we get into it, you don't necessarily have to do all of these things. This is definitely more of an advanced level. And you want to make sure you're doing all the basics really well. Your sleep, nutrition is good. Your exercise program is on point, all the basics that are good to do. You're doing all of those first, because that is going to help you by far the most. But we'll get into more advanced metrics. We had a question on this. And this one is also on iron radio this week. So as you know, you can listen to me there. With coach Phil Stevens, my good buddies, Dr. Lonnie Lowery there. Also check out iron radio, we've got a new podcast for you every week. And this little excerpt is on both podcasts this week, as always brought to you by the flex diet certification, make sure you're on the newsletter, so you'll be able to enroll once it is announced. Again, it is coming up very soon. So we'll have an announcement on the newsletter coming to you soon. But it'll be open again this month in July 2021. So go to flex diet, calm, FLXD calm, a little button there to get on the waitlist, that'll put you on to the free newsletter, right have daily information that's completely free to help you add more lean body mass, improve body composition, and do all of it without destroying your

health in the process. So go to [flex diet.com](https://flexdiet.com). Get on the waitlist, and you will be there. So listen to this short excerpt here on advanced recovery metrics. Either it's going on it's Dr. Mike T. Nelson here and wanted to answer a question that came in actually on iron radio listeners forum hear this from Nathan had. He had a question for myself? Phil might answer this one too on iron radio. How do you program recovery methods? For example, I've heard Mike talk about how you can overdo multiple recovery methods. I have a foam roller grasslin tools impact gun 10s unit and bands? How would I program recovery? Or am I overthinking this? So my thought is I look at I primarily use heart rate variability, and that allows me to move items into things that are more para sympathetic, or more sympathetic. So parasympathetic is the branch of the autonomic nervous system, that is the rest and digest branch. The sympathetic side is more the stress side of the autonomic nervous system, fight, flight, freeze, etc, all of the F's. Now most of the time, when we think of recovery, generally we're thinking about parasympathetic items. And that's good because training for the most part is a sympathetic response. If you've ever been too high in parasympathetic tone, your performance in the gym can be pretty lackluster or feel hard. For people on programming, for example, if they have a powerlifting meet, or a CrossFit competition, or just most competitions in general, especially with gross motor skills involved, I actually want them to be more on the sympathetic side, the day of the competition. Otherwise, it is very hard to get a high level of performance. So you don't really want to be too sympathetic. You actually don't want to be too parasympathetic. Again, heart rate variability is a method that you can actually measure the status of the autonomic nervous system to determine how much parasympathetic versus sympathetic you are. There's different ways of doing that. You can use the aura ring, which I have and I like for HRV That will generally get you into the ballpark. However, if you have a very low resting heart rate, HRV may not move around all that much on aura, because it is collected during the night. And it is an aggregate from your sleep. When you're laying down, you have the high amount of parasympathetic tone. Again, if you have a very low resting heart rate, so you're hitting the high 30s, or even low 40s, for resting heart rate at night on say, the aura ring, most likely your parasympathetic tone is going to be very high. And what I've seen on those individuals is that their HRV doesn't move around a whole lot. Meaning they could brutalize themselves in the gym the day before, their HRV doesn't move all that much. And that's because they have something called parasympathetic saturation. The parasympathetic tone is so high, and they're doing line down, that the HRV just doesn't move a whole lot. Imagine that you're seeing on the beach, and then you have this baseline level of just all these really high waves coming by all the time, you're not really going to see much else. So for that, and for most people, if they're using it to guide training, and they want to do this on a kind of a day by day basis, I still recommend a one off reading first thing in the morning. Right now I primarily use the isolate app. So instead of athlete it's isolate with an eye. And most people will do that seated first thing in the morning to get up, use a bathroom, do whatever you need to do sit down, but on the heart

rate strap or they have a finger sensor, I generally use a heart rate strap because I can use it for heart rate during exercise also, and then rest for about one, maybe two minutes, and then do the measurement measurement will take about 55 seconds. So you're looking at a total time of like three to five minutes, which I think is a pretty good investment for what you get. And from that you will get resting heart rate. And on the Iafleet scale, they measure it from a one to 100 scale. So they actually take what's technically called a time domain measurement, then milliseconds, and they translate it to a one to 100 scale. On aura, you're actually looking at the time domain measure in milliseconds. So you can't necessarily compare the aura score per se, to the iflight score. Unless you know the algorithm to convert them. If you get really stuck on that email me, I actually know what it is. So they are a little bit different. So once you have, let's say you're doing the isolate measurement, and you're tracking that over time, so you're doing it most days, you'll now know your daily measurement of heart rate variability. So that's amount that you are parasympathetic versus sympathetic. And you also know resting heart rate. And you know about where your seven day average is at. This then gives you a good metric for both where you're at, and a way to measure if your recovery methods are helping. So the big key with recovery methods is you don't want to do anything to kind of mess up the stimulation that you did in the gym. Now, granted, most things aren't really going to mess that up too bad at all. Some things, maybe n said maybe there's some interesting stuff with potentially very high amounts of vitamin C directly after training. And most of that was in most studies, maybe antioxidants, although again, most of that was on vitamin C and vitamin E, and not worried about eating fruits and vegetables or anything like that. Cold water immersion, if done immediately after training for hypertrophy, and you were in mill temperature below 50 degrees Fahrenheit for 10 to 15 minutes could potentially interfere with hypertrophy. We've got some pretty solid data that says that it does. But again, how much in terms of muscle mass or lean body mass? Does that cost you if you did that exact protocol is kind of unknown. The flextight cert I went through and reviewed a bunch of studies on that. And there was only one study that use dexa the whole body level. And it was pretty hard to pull out from that. What was really the effect. The other ones used a cross sectional area usually from biopsy, so hard to say what that really means in the real world. And again, that was only if you're doing relatively well. hold water, relatively long period of time and done immediately after training, we don't really think that that will interfere if you do it in the morning or even a couple hours later. But again, those studies haven't really been done yet. So by using heart rate variability, you can then determine Are you a little bit high on the parasympathetic side, are you a little bit higher, more stressed on the sympathetic side, from there, you can then theorize what your interventions would be. So I originally heard about this. Around the same time, I was kind of thinking about this from Joel Jamison. So shout out to him. He's been talking about this for quite a while. And from the sympathetic side, if you are more stressed, things that help increase parasympathetic tone are going to be beneficial. More sleep is always helpful.

more calories, helps I find more micro nutrition helps. That helps just those help across the board in general. And then longer exhale, breathing work. If you can get outside to look farther away, and kind of more of the panoramic view. Dr. Andrew Huberman talks about this, now it's going to be a little bit more parasympathetic, having a slightly longer exhale, compared to inhale, it's going to be a little bit more on the parasympathetic side, you had mentioned you have kind of the impact gun, I find that can be helpful. I find doing some type of movement right after it is most helpful. So I'll do some work on that. And then I'll go for maybe a nice evening walk. So that is much more on the parasympathetic side. And in general, blood flow tends to help either sympathetic or parasympathetic, you could do some light work with bands, I don't have too much experience with a 10s unit. To be honest, I think it may be helpful, but you'd have to play around with it. I'm a little bigger fan of microcurrent, whether that's dolphin or something like a heli device, those are kind of my go twos right now, if you are more on the para sympathetic side, which most people won't see as often, but can happen. Up until probably five or seven years ago, I didn't really think that was a thing. my thought process was always Oh, training is a stressor, you're going to be more sympathetic, just do things to help with rest and recovery, your recovery thing should all be parasympathetic. But then I found that some people The next day, especially if you do a lot of higher intensity, using my air quotes here, kind of lactate based work. That high intensity interval training. If you're really going too hard for intervals of say, 30 to 90 seconds, like strongman, mental ease things of that, I find that the next day, you can actually be a little bit too high on the parasympathetic side. I've been able to recreate this in myself and several clients over the years. Now, of course, rest can help with that. But if you want to kickstart the process a little bit, you'd want to do something that is more sympathetic stressor. But we don't want to brutalize you too much. We don't want a lot of East centric load or even a lot of volume. So I got this from my buddy Coach Cal Dietz, I like doing a trap bar deadlift, and put the trap bar underneath the pins and like a power rack That's bolted down, and you'll set it up. So you're about two to three inches from the lockout. So you have the trap bar unloaded and it is underneath the pins. So you're going to pull up slowly until it hits the pins. Ideally, your position is going to be about two to three inches from lockout. And you're going to pull as hard as you can against the pins for around six to eight seconds. So what you're doing is a very high output sympathetic stimulation. But there isn't really an essential like there really isn't any load on it. So you're not going to further impair your recovery by doing a lot more work. So things like that could help. I mean, in theory, if you're really good at it and your tissue is experienced a few light bounce plyometrics might be helpful. Things that are a little bit on the short term sympathetic side. You can play around with cold water immersion. If you have access to that. I have a converted freezer in my garage, and I've cocked the the inside which works well. If you use cold water immersion, what I've done for trying to be a little bit more sympathetic, is I would have it be as cold as possible. And then I would do the time in it to be very short. Again, if you've got access to very cold

water, a shower, if you can safely get out of a running stream something Unlike that, what do you want is the cold water to hit your skin. And then not much after that, if you've ever jumped into really cold water, you know that that is a massive sympathetic stimulation, right when the water hits your skin, especially your face, you've kind of gasped for air kind of takes your breath away. Fortunately, some people have drowned in this manner, because they are not used to it. And they go in, they have kind of a gas reflex, and their head is down in the water, and they can inhale water and drown that way. So again, be very careful if you're doing this in open body of water. So that is using the sympathetic side of cold water immersion, you're primarily trying to light up the sympathetic nerve endings on the skin, and then have not much of a cooling or change or blood flow redistribution after that, for more of a parasympathetic ideally, if you're using cold water immersion, I would do a little bit warmer ish temperature, and by warmer, usually, upper 40s, somewhere in there, and then I would go in a little bit longer. Again, this all depends upon your safety and what you're accustomed to. For myself, since I'm getting back into cold water immersion after traveling, if I'm wanting more of a para sympathetic, I'm going to get in right now my temp is at 47 degrees. And I'll stay in for about two to four minutes. And I'll just breathe really easy through my nose. So I'm trying to control a little bit of that sympathetic stressor, I'm going to stay in long enough to try to get a redistribution of blood flow. So you know, you probably hit it right, you'll want to get out before it gets difficult, it should still feel pretty easy. You don't want any aftershock or anything like that. And if you don't dry off right away for like about a minute or two, if you see your skin turn a little bit red, then you probably are around the right spot. So what that is a redistribution of blood flow. Again, walking can also help with that. So that would be my thoughts. Just some simple things you can do. I like using as I mentioned HRV to determine at least from a nervous system standpoint, am I more on the parasympathetic side? Or am I more on the sympathetic side, or maybe I'm just doing good and I don't need to worry too much about it. Again, it always depends on what phase of your training you are in. You don't want to do things to screw up the adaptation. Again, the adaptations to training are relatively robust. But if you are approaching a higher level or more of elite levels, and using different types of recovery methods, it does become a little bit more important to make sure that those are matched up appropriately. And when you have your HRV, you can determine Are you looking to do more of a para sympathetic intervention for recovery? Are you going to do more of a sympathetic intervention for recovery? So there you go. Thank you so much for the question. And take care. Thank you so much for listening to the podcast. I really appreciate it. As always go to flex diet calm to get on to the waitlist, and the daily newsletter for all things related to increasing lean body mass, and better body composition, and doing it all without destroying and actually improving your health in the process. So go there flextight.com flxdt.com thank you so much for listening. I really appreciate it. If you can leave us a five star review, whatever you feel is appropriate. And any comments that would be great. Hit a subscribe on

whatever platform you're on because that helps us out and allows us to get more guests and spread the good word. Stay tuned. I've got a bunch of great interviews lined up over the next couple months that you won't want to miss out. Thank you so much. Really appreciate it. Talk to you all soon.