

Dr. Mike T Nelson

Hey there, welcome back to the flex diet podcast. I'm your host, Dr. Mike T. Nelson. And today we've got a treat to we're gonna talk to Warren, all about reflexive performance reset. And just a heads up, we've got more great guests coming up on the podcast. I literally just got back in town here from the International Society of sports nutrition conference, down in Fort Lauderdale, Florida. Amazing time, if you followed some my stuff on Instagram, which is just [@drmiketnelson](#).

I was trying to post a bunch of summaries of the studies there. But that was awesome to see everyone. And hopefully, I'll see some more of you out there next year, I did get to meet a couple of you at the conference. So thank you for coming up and saying hi, I really appreciate that.

And today, the podcast is brought to you by physiologic flexibility, you can go to [physiologicflexibility.com](#). And you can get on the waitlist and get all the information for the next time we open the certification. So if you're pretty good at nutrition and recovery, you've got a solid exercise program. And you're wondering what are the next advanced things you should be doing to increase your ability to recover resilience being more anti fragile, and just generally being harder to kill, I would check out the physiologic flexibility certification, go to [physiologic flexibility.com](#).

And today, we're talking all things RPR reflexive performance reset, you may or may not have heard of it, initially heard about it through my buddy Coach Cal Dietz, here at the University of Minnesota, going back, and has it been seven years now I think somewhere around there, I'm losing track of time, probably longer than that even. And I initially took the training from Doug Hill, who does be activated training. So how it started is I think Cal found out about it through a Chris Corpus. And he had Doug come over from South Africa to teach in the US.

So I took one of the certifications that Doug taught for level one and two, that would be activated training. And it was so useful that Cao GL and Chris licensed from Doug to teach his material as RPR, reflexive performance reset, but was teaching it to strength coaches and personal trainers. So the material does overlap a fair amount. So be activated training right now is taught by Doug and his staff. And that's generally more of the medical model. So physician's assistants, physical therapists, chiropractors, and these, etc. That's taught as a more hands on based model for bodywork. And then if you're a trainer or a strength coach in that realm, it's billed as RPR, reflexive performance reset, and then you have the clients do the drills on themselves. So I do kind of a hybrid here in Minnesota. So I'll do some of the bodywork on people and then testing. And then I'll have them leave and do the drills on their own.

So that's usually the most common questions. I know sometimes in the podcast here, I use terms a little bit interchangeably, and that does get confusing. So a warrant had some brand new research RPR. So I wanted to get him on the podcast and go through what he did in his study, what did he find? And just overall a general discussion about RPR. And its its effects. In terms of disclosures, I have, I guess one disclosure with RPR. I do teach for them on occasion, I've taught level one and level two several times in the past, especially before COVID. And I currently don't have an affiliate link or anything like that. So if you go to the course or if you sign up, don't make any money off that. But if I do happen to teach, then obviously I get paid to teach. So I do have some vested interest in it that way. I do sessions here in person in Minnesota, and I've had people from all over, stop by and fly in to do sessions. So I've wanted to be super beneficial. But again, but stuff that's brand new. It's always nice to look at the research and what it is based upon so we can get a better idea of potentially how we could make it better and possibly understanding some of the mechanisms to so enjoy this podcast with Warren about all things RPR and brand new research in that area.

Dr. Mike T Nelson

Hey, what's going on? Welcome to the Flex Diet Podcast. I'm your host, Dr. Mike T Nelson. And we're here today to talk about some RPR, reflexive performance reset, we have a special guest. So if you want to just say a short introduction about yourself there and how you got into RPR.

Warren Bartlett

Sure. I am Warren Bartlett from the myState University, and Plymouth, New Hampshire. And I'm in a master's graduate program of exercise science. And I also did my undergraduate at mistake. I did track and field for four years. And I'm a big RPR, proponent and practitioner. I'm a CSCs personal trainer. And yeah, I think I spell covers all of it.

Dr. Mike T Nelson

Nice. Nice. And so how did you originally hear about RPR?

Warren Bartlett

Yeah, so I think I originally heard it through Cal Dietz by phasic. And I watched on YouTube and I didn't really believe it at this. Watching the video didn't really look real. Then Be activated, you

Dr. Mike T Nelson

find like people trying to poke around and stuff.

Warren Bartlett

Yeah, like you would see cow. You know, doing the resets on people and all of a sudden they're stronger. And they just didn't really make sense to me at the time. So then I did the certification. The Level One two, with JL Holdsworth and, and yeah, so I did that. What originally happened was I got Achilles tendonitis. In my ankle, I couldn't run my last season of track in college. And so what really convinced me, I guess, convinced me on our PR was, I did it all myself and it profoundly worked in significantly improved my Achilles tendonitis. And that's when I went to grad school. I was like, I gotta, I gotta put some research behind this and see if they only work on one person to work on multiple people. You know, let's, let's get something behind this.

Dr. Mike T Nelson

Very cool. And how would you describe RPR? For people listening? Who are like RPR? What I don't understand I've never heard of this, like, how would you describe it to them?

Warren Bartlett

Yeah, um, when I write my scientific studies and papers, I describe it similar to acupressure. And Acupressure is a 2000 year old Chinese medicine that essentially involves applying pressure point, applying the pressure around points around the body. And it's similar. Maybe not necessarily in the pressure points. But in theory, it's similar.

Dr. Mike T Nelson

Go on, what is the benefit for that? So someone's a strength and conditioning professional. They're like, Oh, yeah, I can poke around on myself. But what's like kind of the benefit from it?

Warren Bartlett

Sure. Well, just based on the act, the current literature on acupressure, Acupressure is shown to decrease pain in elderly populations. It's shown to increase shoulder mobility in older populations. And that's just acupressure. Right now, there's limited research and RPR until you know, until my study really gets published and peer reviewed. But it could potentially have benefits and flexibility and strength gains for your strength and conditioning professionals. Cool.

Dr. Mike T Nelson

And is this something they can do on themselves then it sounds like I know there's two different forms there's RPR versus kind of the be activated training.

Warren Bartlett

Yeah, so I'm not as familiar with the activated They did talk about it RPR is intended to be done by the person themselves. And from my understanding be activated is more of a clinician

condition base where the person is doing it on another purse. So RPR is done oneself and really doesn't take a lot of time to perform. And it's pretty easy to be done.

Dr. Mike T Nelson

Alright, yeah, my bias obviously is I teach once in a while for RPR and then I originally heard about it from from Cal and he had me go to the first training that Doug Hill did have the be activated training at that time. So I was out I think I was still doing my still doing my PhD at the time I can't remember now like all the time seemed to just go fall together. But he's like, Hey, I got this guy coming in from South Africa. You gotta go This training I'm doing, and I'm just like, Ah, I don't know about this. I'm like, Well, what is it? He's like, crazy shit, man crazy shit. Like, okay, like, how much does this? It's like, it's like \$1,500 for two days, like, what is it? It's like June, this is like January, it would have been like anybody else I'd be like, No, I'm not giving you \$1,500 to have some crazy guy, I don't even know talk about a system that I don't understand at all.

But I'm like, wow, Carl has been generally right about most things in the past. So I'm like, sure, whatever. And so that was the first time I think a second time Doug had taught, be activated training in the US. And he condensed the level one down into one day and level two into one day. And that was pretty, pretty profound. And then after that, I know, cow and Chris corpus, and JL got a license from dog to teach his material as RPR, reflexive performance reset, and exactly what you said, the differentiation there is that you're teaching it to strengthen conditioning people, physical trainers, and kind of a non medical model. So each person can apply it to themselves. And then Doug still kind of teaches his version of the model, which is a little bit more to medical professionals, you know, physical therapists, chiropractors, massage therapists, etc. So, right. Cool. So what other results? Have you seen just kind of anecdotally from RPR?

Warren Bartlett

Well, I mean, there's multiple families. My experience was it, you know, essentially cured my Achilles tendinitis, which was, you know, debilitating.

Dr. Mike T Nelson

Walk us through, like, what did that look like? Did you, you just kind of watched a bunch of videos, and you're like, I don't know, I'm just gonna poke around on myself here. And like, how did that process come about?

Warren Bartlett

So this was after I did the certification. And I was running in my Achilles tendonitis slurred back up, training really hard. And I was in the middle of warming up for a workout on the track. And I was telling my, my body there and like, I might not be able to do this workout, my, my Achilles

is killing me, I might almost can't run. So I'm like, give me a second, I'm gonna try this RPR I just learned. And so I did the calf reset. So going down the side of the fibula, and then directly behind the calf.

I did that for about a minute. And I had my little RPR stick, which I bought for like, \$3. I find it helped a little bit to get really behind that calf muscle. And then I went through all the level one, you know, Zone One, two, and three. And then I did a couple laps, and almost miraculously, my Achilles did not hurt at all, and then went through the whole workout. And it was incredible. Like, you know, we were talking about that in the conference, how tendinitis could potentially be laughed at, and 20 years for the mechanism. It's like, you know, they, they always say it's a what a mechanical lens and a neurological lens. So that's kind of their theory on it. Um, but that was my greatest experience with RPR.

With my study, it was really cool, because I got to physically see the results of RPR working in front of me as a as a researcher, I just had to measure and not try to be biased at all, but you would see it right after you did the resets this person had. Yeah, at least 10. Five to 10 more degrees range of motion around their body.

Dr. Mike T Nelson

Yeah. So walk us through you decided to do a research study on RPR. And then, before that point, did you What is kind of the research state of what's been published so far on RPR? In terms of published work, I guess.

Warren Bartlett

Right. So current public literature, it's pretty limited. I found a couple graduate or doctoral thesis is that weren't really published, they still did run stats on them. There was one that looked at biceps for Morris, activation and step ups in RPR, which I found interesting. But it's really limited in terms of what they're actually doing. So when I designed this study, I wanted to replicate the the test in a pretest. And the test exactly, kind of how they do it. So like the the classic RPR video, you see the person pulled their arm out, they, you know, test their strength. And then they run them through a couple of things that make the arm drop down really fast, and then they do their RPR reset, and then all of a sudden they're stronger. I kind of want to demonstrate that in my study by showing you a baseline, and then a retest, which is kind of how I set mine up.

Dr. Mike T Nelson

So walk us through that, like, what did you use for baselines? And then kind of what did you have for groups and that type of thing.

Warren Bartlett

Right, so baseline, essentially, the subject came in not warmed up at all, because our PRs essentially meant to be a warm up. may come in, I have my goniometer. And we measured 11 different movements. We measured hip flexion, hip AB duction, hip ad duction, shoulder flexion, shoulder abduction, on both right and left sides, ankle inversion, ankle e-version, ankle dorsiflexion, ankle plantar flexion. And then we did right and left hand grip. I think that's all trying to think here. I'll have it in front of me. So yeah, about 11 movements. And we had them either go through acupressure, placebo, or RPR. They did that for 10 minutes. And then we read the test stayed all of the movements that we did, initially, it was 28 subjects, all college age, there was about 15 males and 13 females. And the they are all general population subjects. So they weren't really athletic. If they were athletes, they had to be not in training and had to be a couple months away from, you know, from them vigorously training. I feel like I'm missing something here.

Dr. Mike T Nelson

Yeah. So on the the three groups was one of them, you know, kind of designed to be like a sham group, because one of the arguments is that if you just have one group that does, I don't know, passive warm up for 10 minutes on a treadmill, right? I'm just making this up versus another group who does the RPR intervention, we could then argue and say, well, that it's just a placebo effect, because the one group is doing something on themselves. The other group is just passively sitting in a sauna or just doing some type of general warmup. But it sounds like you had three groups. And one of them I'm assuming was kind of more like a shampoo where they're poking on pressing on different parts of their body, but not necessarily the correct RPR targets.

Warren Bartlett

Right. So no, it wasn't that let me correct that. So the three groups meet, the person came in, it was randomized, they either did RPR acupressure for SIBO had to wait 24 hours. And then they did the next one another 24 hours, and they did the third one. So each subject got RPR, placebo, and acupressure over the course of the three days timespan. Obviously, with timing, sometimes they would be out longer. But essentially we're comparing oneself to oneself. So what is Warren's current self, so it didn't really matter if they were less flexible one day, you know, if they were less less flexible RPR was would supposedly increase that anyways. So it wasn't really concerned if like the, the measurements were significantly off like they were really stiff from something. I controlled for muscle soreness, so I told them not to partake in vigorous activity 24 hours before testing sessions. I feel like I'm still missing something and you're helping me out.

Dr. Mike T Nelson

Yeah. So there you're looking at a sort of a randomized intervention controlled trial, right? So they come in your baseline, they're going to be randomized either three, one or three

conditions. And then you're going to look at the pre versus post per session. And then they'll go away, they'll come back they'll get the other condition they'll go away come back and get the third condition. So you're looking at each person in comparison to the three different interventions you had Correct? Correct. And on the acupuncture, what did that look like? Are they like what was the difference between the acupuncture and the placebo?

Warren Bartlett

Right. So, based on current literature, I saw what I expected to see whereas the acupuncture which was at the year, so there was two pressure points at both years. So two and a half minutes on for total your pressure points. They showed significant increases in shoulder abduction and shoulder flexion. And that's what the the current literature has shown in In elderly populations that it did increase shoulder shoulder mobility is by about 10 degrees on average. With with with means.

So that was very cool seeing that RPR showed increases over placebo and acupuncture on hip extension. shoulder flexion and abduction were not significantly increased over over acupuncture but over placebo. So clearly because acupuncture increased shoulder mobility RPR didn't, wasn't significant over that, but it was significant over placebo handgrip was significantly affected on the right side with RPR. So I saw differences on RPR only worked on one side and the thing ugly over the other. So that could be potential. I have no idea. But it could be potential future research topics down the road.

Dr. Mike T Nelson

Do you know if they were right hand or left hand dominant? Did you have any left handed people in the study? And just out of curiosity?

Warren Bartlett

I've gotten that question a lot. And I have not. I did not record that. I could always go back through and pull the subjects because have all their contact information.

Dr. Mike T Nelson

Yeah, you can look at baseline strength right versus left to and see if it's always increasing in the hand the comparison wise a stronger which you could infer might be their dominant hand potentially to

Warren Bartlett

Yeah, shoulder only thing here, hip flexion denied increase hip A B duction. Increased with RPR. Hip ad duction do not increase dorsi flexion increased significantly with RPR. Plantar flexion not really no really changes there. And ankle inversion and E version. No real changes there. So really, the main factors that RPR affected was hip extension, shoulder mobility and

hand grip from essentially what I found. With both sides, the dorsi flexion in the hip. A B
duction. Those rolling on one side in the hangar was on one side.

Dr. Mike T Nelson

Why do you think there's kind of a one sided difference? Is that a curiosity especially in sounds
like it showed up in other lower body also?

Warren Bartlett

It could potentially be we're just dealing with such a small degree of motion. I'm not sure really
could be they needed to do the resets more. So no, I got 10 minutes to do RPR. Okay, in
future research, I'd like to see the maybe do repeated RPR, which I've seen an occurrence day
that just came out. But they do RPR and then retest retest, they do it again, to three tests. Now
they said in the conference RPR is like brushing your teeth, the more you do it, the better you
get at it, which makes sense to me, you're going to be able to apply pressure better through
through those pressure points. I think that could potentially help. So, you know, I have to
assume as a researcher, they were they were doing it correctly. And they were doing it
correctly because I was instructed on that. But I think if they practiced at it, they'd get better at
applying pressure, they would become more familiar with the exact points where I want them
to be. So I think that could potentially change the right and left side discrepancy that I found.

Dr. Mike T Nelson

And so were you the one that was giving them instruction on how to do that for all the subjects
then so it was the same person giving instruction?

Warren Bartlett

Yep. So I did all the research, I did all the instruction and measurements. So that since I did all
the measurements that kind of reduces that. Inter rater variability of measuring for the
goniometer for RPR, I had a script. So everyone was getting the same cues and same
message on how to do it was all time so each placebo at 10 minutes. Acupressure got 10
minutes and RPR got 10 minutes. And I made sure to instruct belly breathing with RPR which I
found I think a lot of the current studies that have come out on RPR that did not show a
significant difference. I don't think they were doing correctly because they didn't instruct belly
breathing, which they are huge on at the RPR conferences that you need the belly breathe to
really make These resets work from what I've seen. And when I found, maybe the subject
struggled to belly breathe, because I just could not get them the belly breathe. The RPR didn't
really work on from what I saw in my study,

Dr. Mike T Nelson

when they kind of, I guess anecdotally matches kind of what I do. So I do a little bit more of the
be activated model. So I'll work on people here in Minnesota. And then I'll do all that baseline

measurements pre. And usually what I've noticed over time, rather than doing this now, six years now, once I can kind of see their breathing be pretty good, right? So I tell people, like imagine your ribcage is like a balloon inflating 360 degrees, right.

So once I get that full motion, especially up near the top, the ribs are not just on a hinge flopping up and down, that everything else tends to go pretty fast from there. And it seems like they get anecdotally a better result. And that those results tend to hold longer. Or, you know, again, it's comparison to when I started off earlier on, which probably didn't have as much skill. I didn't spend as much time doing breathing stuff that I've just noticed that everything seems to get better once that is better movement. But, you know, again, I have the luxury of most of the sessions I do are sometimes an hour and a half to two hours, you know, so I have the luxury of time and doing something kind of different per each individual that's in front of me too.

Warren Bartlett

For sure, yeah, that makes sense.

Dr. Mike T Nelson

Cool. Would you recommend RPR to other people? Or what was kind of your takeaway from this?

Warren Bartlett

Yeah. So I think the big thing with RPR is allowing people to see what it does. Because once you start having someone karate chop their thighs, they really start to question what they're really doing. So with RPR, they do those buying tests, and really allows you to see what it does. Now I saw how it worked on my ankle. But yeah, I would suggest it to pretty much anyone it's really easy to do, it only takes about five minutes to do. I only do it before I work out. RPR suggests you do it when you wake up, before you work out after you work out. And before you go to bed, I don't really have trouble sleeping, they claim that it improves your sleep.

So I don't really necessarily do it before I go to bed. But I do always find when I do the behind the head, occipital reset, I tend to salivate which would suggest to me, I'm shifting into a parasympathetic state as they suggest. But I think for my more academic folks, showing them the research that is currently coming out that this could have an effect on performance would be huge, because now we're we're speaking their language. A lot of people are against our PR because they don't see the research. They think it's a see the buy in tests in the test, retest the arm, they they're very skeptical, which I understand. You know, there's, but if you wait for the research, you're going to be going to be late.

You know, this is a pretty new topic in the strength and conditioning world. So if you're going to wait for, you know, 1020 years of research to come out to really back RPR you're going to be late to the ball. And so that that'd be my suggestion is try it out a lot. I think a lot of the skeptics that I've met have never actually tried our PR, which I find interesting because it's so easy to do. But yes, I would suggest this to pretty much anyone it's really easy.

Dr. Mike T Nelson

I mean, the first time I saw it, my reaction was this makes no sense whatsoever. This is like probably one of the dumbest things I've ever seen in my life. Like there's no way that this is going to do anything. If it hadn't been you know, Kyle recommended it to me, I'd probably be like, I don't know. But what I noticed even just after the first two days, it made like a huge difference, especially the visual reset of the dog did on me made a huge difference in terms of my ability to catch eye coordination, that kind of stuff was a lot better. And then I actually the first 30 People I used it with I tried to get as many people in that group. So I just said okay, I'm going to do 30 sessions for free.

And after that, I I spent like 15 minutes calling around at that time to Like, who would I could find was like the most expensive soft tissue person in Minnesota. Some guy was doing I think it was like 150 A session. I'm not sure how long the sessions were. So I'm like, okay, great. So I'm going to charge \$200 a session then the time. And so the first 30 people, I just kind of gave them a number. I said, Okay, you know, once it hits 30, then it's gonna be this, this amount of money. And I tried to get people who had kind of sort of a no SIBO bias, who are like, nah, this isn't going to work. I've tried everything, like, great, come on in. Because I'm like, if it happens to work on those people, there's probably something going on.

Right. So there's probably at least, some physiologic mechanism at work if it's working in the face of a no SIBO effect. And, you know, most of the people saw it pretty good results, like increase performance on a manual muscle test, which again, has its pros and cons. But at the time, I don't. So far, I haven't found anyone who's going to wheel \$60,000 biotechs into my living room where I can do isokinetic testing or anything more on it. Yeah, and I've generally found that it's been, you know, out of all the modalities I've done, I found that it's been extremely effective. Now, again, you could say, Yeah, even kind of biasing people in in one direction, and I'm only working with a sub select of certain people want to get better, which is probably true, but, you know, models, people, I've tried a whole bunch of other stuff, too, that also didn't seem to work.

Warren Bartlett

For sure. Yeah, I think that's a really good idea with bringing in unbiased subjects. That's something I did in my study, I made sure that no one had done RPR before, because I had a

couple friends that I've shown them that and I'm like, Ah, sorry, you can't be in a study. You've seen it before. So I think that's an important point to make.

Dr. Mike T Nelson

Is there any negative effects from it?

Warren Bartlett

I know Cal has talked about some of the parasympathetic effects of feeling really sluggish, like he shifts people so far, parasympathetic Lee, that they're really sluggish and really sleepy. I don't know if that would happen with RPR. But if you're someone that might be a high responder, maybe you'll feel like the first time you do it, you might feel some really different sensations. Like for me, I salivate. And it's really, really odd. That that's what I feel when I do RPR may say your vision might change a little bit. So lights might be a little brighter, maybe to some people that could be concerning, and I think they have like a health issue or something like that. But I think that just shows that that kind of gives you buying that maybe this is working and it's affecting your nervous system in some form or fashion.

Dr. Mike T Nelson

Were you able to measure like heart rate or heart rate variability or any other measurements like non-invasive measurements?

Warren Bartlett

I did not. This given the timeframe I had, sir, the goniometer II took long enough, you know, 28 times three, that's almost 9090 sessions of about an hour. So I was just literally living in the lab measuring goniometric I got really good at goniometer. Three, well, that's good. But my biggest concern was being reliable, making sure I put the goniometer at the same spot every time. And if you look at my Acebo numbers, it's nice because the numbers are similar, which is showing my reliability to measure goniometer free and there wasn't any major variability with placebo, at least, which I was happy with.

Dr. Mike T Nelson

That the subjects report that it was painful at all when they were doing it.

Warren Bartlett

So the acupressure point at the year, their hand would get tired, which is probably why they're there. I think their hand grip went down on one side, but not on the right. So again, that discrepancy between right and left again with acupressure. The same thing here, the placebo was at the VMO. So again, their hand was getting tired. So the placebo hand grip was lower. Probably because their hands were getting tired pressing so hard. And so they're like, I didn't tell them the press start I just said apply moderate to heavy pressure. So you know not trying

to push so hard. You can't do their hand but you hold your hand someplace for five minutes. It's gonna get a little tired.

Dr. Mike T Nelson

And so it was five minutes of precedent the VMO as the placebo, is that correct?

Warren Bartlett

Yes, that was the SIBO, which I got from current literature from acupuncture. That was the SIBO. Yeah.

Dr. Mike T Nelson

Got it. Whenever we're doing the RPR, I've noticed that other people have reported certain areas can be painful. Was that something you just kind of would coach them through? Or how did you kind of handle that? I guess?

Warren Bartlett

Yeah, I mean, especially for the so as reset, I would just ask them and be like, do you feel a hotspot? Because they usually will tell me if they're in the right spot of the psoas. And they're usually like, Yes, I feel, you know, some, there's some tenderness there. So especially at that, so as reset, which is an inch to the right and down from the belly button on each side. That was really the biggest one that I found across the board. People have that. That tenderness at the right at that stomach.

Dr. Mike T Nelson

Cool. Yeah. And I mean, certainly, I've noticed that with some people, they can become like almost overly parasympathetic, right. So if I have someone who's a higher level athlete, ideally, I wouldn't do it right before a big game or anything they have. Because one, you don't want to really change their nervous system. If you're doing that, too. Usually, I find if their breathing patterns were really kind of stuck, like the ribcage mechanics were not very good. Usually, we get those moving a lot better.

They do tend to down regulate pretty hard, parasympathetic really, I've seen some pretty big changes in resting heart rate, heart rate variability the next day, and probably not the best thing to do before they had a big event, especially a speed and power type event. But, you know, most of them have reported that their sleep was a lot better that night. I mean, I've had a couple shift workers now who I mean, the maximum they could sleep would be seven half hours, even if they had a string a couple of days off. They've texted me the next day that they slept, you know, 10 to 11 hours for like the first time since I can remember.

And so pretty crazy stuff like that. It can be quite painful, though, especially if, in the case of RPR, where you're working on areas of tissue that can be kind of stuck. But I think that's probably at least, what I've seen is probably the biggest negative is because a lot of the points are on areas that are pretty sensitive, right, you're looking at insertion of the ribs and the sternum area, you know, behind the head, potentially the jaw. So that, I guess you could say is a negative some people are into that, I guess, but you're gonna have some point, tenderness and soreness the next day too, which feels kind of weird, it feels like that, like muscle soreness, that kind of concentrated into small areas. So I often joke that I just did a session on someone a couple of days ago that she's like, Yeah, I feel a lot better. But I'm still kind of sore in places. I'm like, yeah, it might feel like a giant put you in a sleeping bag and kind of beat you around the tree a little bit. The next day, you can have this kind of weird kind of point, tenderness soreness to

Warren Bartlett

for sure. I guess kind of similar to that. The probably the largest limitation of my study was my subjects for general population. So some, the women were, you know, larger women. So doing the shoulder reset around the pectoral muscle, it's really, it was really tough of a challenge to get them kind of pass that up into that breast tissue. There's only so much I can really do as you know, with the research scope that I had. So maybe that could the shoulder reset for the women wasn't up to, you know, the the integrity that it should have been? You know, I put that in my manuscript that that's a potential challenge for our PR is how do we get the women do the shoulder reset? That's kind of a tough one I found. So I just do my best there. But you can do the stroking the side. That's part of the shoulder reset, so I kind of made up for it there I suppose.

Dr. Mike T Nelson

Did you have mostly females or males? Or was it split?

Warren Bartlett

Yeah, it was split right down the middle. It was 15 females 13 males, if I remember correctly,

Dr. Mike T Nelson

okay. Was there enough statistical power to see if there's any difference per gender? Or I'm guessing it might be kind of underpowered to look at that, especially with the way the study was set up?

Warren Bartlett

Right per gender, probably underpowered. But I was really happy with the 28 subjects that I got, which definitely lend it enough. US statistical power. So yeah, I guess per gender?

Probably not. I would love to do a sex difference study between men and women. Be, that'd be a cool thing to do. But, again, you need a lot of subjects for that.

Dr. Mike T Nelson

Yeah. And anecdotally, what was the report back from the subjects that people sound like they were excited about doing it and wanting to continue doing it? Or what was just sort of the general feedback? Since you're obviously there for all of it?

Warren Bartlett

Yeah, so a good amount of the subjects. You want me to teach them a little more on RPR? They will all want to know the results of the study. The biggest thing was, there was like four or five subjects that instantly knew they got better after doing the RPR. They didn't know it was a single blind study. So they didn't know what they got. But you know, I had one kid, he only had about two degrees of shoulder extension. Oh, wow. And then he Yeah, so he was pretty locked up from from football. And then he did a RPR. And he had, like, 2030 degrees, and he was like, Oh, my God, what does happen? So that was a really cool thing to see. And, you know, he wants to know more about RPR after the study was done, is he definitely felt it.

Dr. Mike T Nelson

Any thoughts about what are the one of the questions we get all the time is like, well, how? How does RPR work? Right? So if we look at your study, and we say that, okay, it appears to be, you know, increasing range of motion and that, you know, study group of those, you know, confinements, like what is kind of the mechanism of how it's doing that?

Warren Bartlett

Sure, I kind of rely on the, this paper I pulled up from 2004. By caso, it was the evaluation of champion reflexes. Champion reflexes are kind of what RPR has come from. So, given the name of Chapman and Goodheart, essentially looked at these pressure points and speculated on you know, what is happening, and they call them neuro lymphatic resets. So, the idea is that, then the neurological system and the lymphatic system are interlinked. And if we are applying pressure to our body, we're applying pressure to these lymph nodes and lymph vessels, and that's removing some congestion and allowing the nervous system to function properly, or in a better state.

From this case, though, journal that I kind of relied heavily on in my paper, they suggest that there's an increase in muscle spindles. So if we increase the, the muscle spindle activation, this would increase muscular tone, which would make sense for hip extension because you're required to really, it's not a hip extension on the table when you're lying flat isn't really a measure of flexibility. In my mind, it's more of a measure of how well can I contract my glutes and hamstrings without raising my hip off the table. I guess it is kind of flexibility. But if you

have better muscular tone, and better muscular activation, I can now raise my thigh higher off the table than I could prior. And these are general population subjects, but some of them don't have much gluteus maximus and hamstring strength anyways. So that would make sense in my mind, how they were able to significantly increase hip extension based on the muscle spindle theory.

Dr. Mike T Nelson

And on that test was an active test or was it a passive test.

Warren Bartlett

So that was the active one, they were laying on the table and they had to raise their leg off the table. I really wanted to make the tests similar to what they show in RPR. Sir, that the shoulder flexion is a big one in the hip extension is a big one. Those are really my two biggest variables that I want to show I did them all just for continuity. But those were the big ones. And that you know, I think it's both it's both flexibility and muscular activation.

Dr. Mike T Nelson

Yeah, and that always makes sense to my mind I'm I'm not a big fan of static stretching and I've written a bunch about it. I just one if you're doing the old school, sit and reach hamstring test. There's a couple of studies showing that one, we don't even know what you're stretching Right, are you putting on the muscle fiber? Are you pulling on the contractional elements inside like Titan? Are you pulling on the fascial? System? Are you pulling on the vessels, you're probably doing all of it.

And then some of the newer studies, not even new so much anymore. So that your feedback loop to the brain actually gets altered, right? So if you think about the old school sitting reach, okay, sit and reach, and then see how far you can get towards your toes and you go into you feel a significant stretch, or a stretch, that's an eight out of a one to 10 scale, or however they equate it. They have you hold a static stretch, say, for five rounds at 60 seconds each, or whatever you're doing. And then when they measure you again, they're like, oh, wow, you got like a whole more, you got like another inch. But what they've shown in the studies is that your feedback from your nervous system is actually kind of my words is just getting dumber, right, you can get in pushed a little harder before you get the same level of feedback. So yes, you do see a slight range of motion increase.

But to me, I think you're adding an error into the loop of that. Right? So if my shoulder is going back in a weird position where I'm getting close to my end range, I would want more information about where it is in space, not less. So I don't think all the time, we have to kind of look at some of the studies to see, you know, what did they do? Is it better, right? Also, static stretching, if you didn't prolong stretching will decrease acutely speed and power from stuff in

that area? And just, even just the old school anecdotally, like I don't, I can rarely think of any clients that I'm just like, yeah, just go static stretch, and it's solved anything. Right? Sometimes you get lucky if they're like super type A, and you can't get them to wind down and yeah, you know, some static stretching after lifting or whatever might be helpful. But was it static stretching? Was it just the change in their parasympathetic tone or whatever? I don't know what your thoughts are on static stretching?

Warren Bartlett

Yeah, I mean, I'm a distance runner. So you know, I, I'm well versed on the research on how that could be detrimental. I like my hamstrings tight. You know, I like that elastic energy, that free elastic energy I'm getting from tight hamstrings. But I guess kind of similar to that was the test, retest? One of my colleagues brought it up is, especially with RPR, you put your arm out to the side, that you test the strength? And then the retest, you know, did you did you get stronger? Or did you anticipate that there was another test coming? So that was something I wanted to weave in the study I did was making sure. You know, I had the test retest, but I had the placebo. So okay, RPR works. But we got a placebo. Um, so I guess, kind of similar to maybe like stretching, ideas that the test retest? You know, not anticipating that what's coming, is going to affect the result. So did this person just simply reach back and get more shoulder flexion? Or did they actually increase shoulder flexion? That was the biggest concern of my study, I'd say.

Dr. Mike T Nelson

What did you What would you conclude based on that? And based on the work you did?

Warren Bartlett

Um, yeah, I would say that I was consistent in my measuring. And I made sure that people weren't compensating, especially with the shoulder flexion one, so they're on their back, they could easily just arch their back and gain more shoulder flexion. But I made sure to be consistent in how people could skew the result. And yeah, I would say RPR works for shoulder flexion and hip extension. For sure, in this in this setting. What I would like to do next is is RPR better than a dynamic warmup. So we do RPR with a dynamic warmup, dynamic warmup group, and then and then just an RPR groups would be three groups. So to get all right, we have some evidence that RPR could increase flexibility. Is it better than a warm up? Is it better with a warm up? Because that was my colleagues. Next question. Was what's better? You know, should I? Is it better than warmup? Should I just spend my time doing a dynamic warmup or should I spend my time doing this? I think that's the next question. That's got to be answered here.

Dr. Mike T Nelson

And what would the kind of output measurement of that be would you have them do some type of performance test or range of motion? Or how would you kind of quantify what would be better?

Warren Bartlett

I think a mix of both would be nice. So have some goniometer goniometer measures, what would I wouldn't need 12 or 11, like I had before, but maybe two flexibility measures. And then two performance variables either a one rep max on the or five rep, one rep or five rep on the, on a machine, or some kind of squat press, and then some kind of bench press or bench machine. So we get some lower body and upper body with flexibility. That'd be, that'd be really nice to show that it is their strength gains and strength. Because if I can show that RPR increases hand grip strength. Well, handgrip strength can correlate to upper body strength. No, no, that makes sense to me that I could potentially grab of maybe a larger dumbbell and now I can, my hanger is not limiting me and I can row a heavier dumbbell. Or I can row heavier on a machine or, or press heavier.

Dr. Mike T Nelson

That's how I see it. Yeah, and if anyone has tried the inverse, right, take like a pair of fat grips or use like a two inch smooth axle bar to do deadlifts. And you'll fast realize that once your brain realizes you can't hold on to it, like it's the weirdest sensation that you can't really move. It's just because like you don't see people's hips come up early on see anything they just looked like they got zapped by lightning bolt and they got frozen in place. So I always thought that was just kind of fascinating and and everyone's had the inverse experience to where they maybe they're just doing deadlifts on a normal bar, you know, their warm ups, they're like, oh, wow, that was pretty fast. And it just feels like you're more connected to the implement almost always seems to translate into better performance for most people.

Warren Bartlett

Yeah, and grip is definitely a limiter. In a lot of weight room activities, especially with women. So that would be huge that if we could increase anchor at four or five pounds a year we can we can grow five pounds heavier, your hand grips not going to limit you.

Dr. Mike T Nelson

Cool. So are you able to do the next study? Are you just kind of graduating and moving on? Or what's next for you?

Warren Bartlett

Yeah, so I got one more year in the graduate program. So it would be a thesis. So the initial study I did was for the research class, this next would be the dynamic warm up versus RPR.

That would be a thesis with a lot of subjects, and a lot of time in the weight room in the research lab. So I'm looking forward to putting it together.

Dr. Mike T Nelson

Very cool. And this current study is under review. Are you in the process of it's been submitted or kind of where's it at in the process?

Warren Bartlett

So what I plan to do is present this in the fall at ACSM. At the ACSM conference in New England. And right after I present it, I will submit it and to get published to either the journal I have here, probably the Strength Conditioning Journal. Okay, just Yeah. Yeah. So because you can't present published papers at ACSM, I suppose. And I'd really like to present this in front of a large group that has no idea what RPR is, and would be very skeptical about it.

Dr. Mike T Nelson

Cool. Awesome. So what are your plans once you once you graduate?

Warren Bartlett

Yeah, so I have, like two different roads that go with this. Road. Number one would be cardiac rehab. Getting in the clinical setting of exercise physiology, are looking for, you know, coaching opportunities in either the weight room or at the collegiate level for track. I think that'd be two different roads, I can go. I'm still kind of figuring it out. But I think it's going to depend on the opportunities that arise for me.

Dr. Mike T Nelson

Awesome. And then do you still do RPR on yourself today? What have you kind of noticed in your own and have one experience with it?

Warren Bartlett

Yeah, so I still do RPR just before I workout. I find that sufficient for me. And I know everyone's a little different. So I do it before I workout. I still salivate every time I hit the occipital and so as. So there's something about that, you know, everyone's a little bit different. And, yeah, I'll still feel my Achilles every now and then. And that's what I know. All right, Tom. Do the calf reset. And once I do that calf reset. It clears it up, right way, it's just incredible to me. But then I've had someone ask me, Is it really Achilles tendonitis?

Or is it kind of your mind playing tricks on you? And it kinda like trying to like cashed out maybe. But then I remember I remember back to how my original Achilles tendonitis felt. And if felt feels exactly like it does when I feel my Achilles from all the mileage I do and hard running.

When I feel like Kilis it's exactly like the Achilles tendinitis initially felt. So I'd have to tell them, you know, I think RPR works on tendinitis. That'd be a whole new can of worms for a study.

Dr. Mike T Nelson

Yeah, that gets into what is tendinitis? What does tendinosis? What does tendinopathies like there's some the general kind of overview would say that tendinitis is an irritation, but it's more inflammation related tendinosis would be more of a scrambling of the local connective tissue, collagen fibers etc. I don't know, I'd have to go back and look to see what that's actually based on. Right? Because you'd have to do, obviously, some dissection or animal work or something in that area. I don't know if you could pick up anything on imaging.

But at the end of the day, a lot of the things the stuff people are dealing with are just based on what is the person present as their symptoms? Right? And if the symptoms got better, yeah, from a clinician standpoint, cool, like you did your job. From a research standpoint, then you would probably want to know, okay, well, what is the mechanism? What is actually, you know, different at that point. And that gets to be a little bit trickier, I think, to figure out to

Warren Bartlett

write, you know, in future research, you'd have to find an athlete that would already have tendinitis, or some some form. And then I don't know how necessarily that would work. Out, there'd be any ethical issues with that. Not Sure. That'd be really cool. If I could, you could see happen on athletes. So we have an athlete with, you know, tennis elbow, or Achilles tendinitis. And we do the resets, did it work, did it not work? I'm gonna be a really cool study.

Dr. Mike T Nelson

Yeah, it's just, I mean, my experience on that just anecdotally, with RPR be activated is that someone is really kind of overcompensating with grip, right. So if you watch them doing kind of a lower body exercise, where their hands are kind of free to they kind of squeeze one hand more than another hand, a lot of times, I've noticed, that's the side that has more some what they report as like a tendinopathy. And usually, if we get them to work better, right, so we get the muscle activation, we want just by manual muscle test, and their hand can stay open.

Most of the time, I've noticed their tendinopathy, or whatever it was, seems to go away pretty fast. And again, I don't think that's all cases, you're definitely going to have some people who've got just probably poor inflammation status to begin with, you definitely have some people who have overuse injuries. But what I do is I'll check with for that first. And then a lot of times I just have them do the direct opposite. And so their client now where, like the bottom part of her elbow is painful doing a dumbbell bench press. So she's doing a lot of rowing now, but instead of having her palm down, it's actually her palm is facing up pulling with her elbow.

So I found just by changing the mechanical loading, a lot of times you can circumvent a lot of those cases, too.

Warren Bartlett

Yeah, that's a good point. Well, what's the root cause of it? Yeah, that's, that's another really good point.

Dr. Mike T Nelson

Yeah. Cool. So would you recommend people learn more about RPR? In the meantime, then?

Warren Bartlett

Yeah, I mean, there's, there's so many different avenues you can go with RPR. You know, it can affect vision. So you can you do certain colors and do the resets that are just part of your vision. Or you might have I forget what they call it, but where your nervous system has past trauma. So you do a little eye test, and the the nurses met trauma there and that's kind of where your nervous system shuts down. I don't like to say that they say that a lot in RPR, that your nervous system shuts down. I get a lot of flack from that with my colleagues. But that's the idea is that there's this past trauma from maybe a fall or an injury, or a hit in football or some something like that. And you have this vision trauma that you could correct with RPR There's RPR with sleep. And there's it's a very wide range of topics just from one kind of method, which I find really interesting. And this makes me want to study it more.

Dr. Mike T Nelson

Yeah, I've done a fair amount of visual resets on people have had a lot of, I don't know what they've had for their past history, I only know going off with just an oral history of what they report. And sometimes people don't remember even traumas and everything else that they've had happen. But my general thought process with that is, if I saw one guy was a goalie, you got hit on the side of the face with the puck, if you're if you believe your body is organized for survival, then your body's gonna want to do everything possible in order to survive.

So for him getting a hit on the side of the face, moving his eyes to the right, being in that position is probably going to be pretty threatening, right? Because his brain is gonna go, oh, yeah, remember, the last time we were here in this position, some really, really bad shit happened to us. So let's kind of avoid that. And let's not go there as much as possible. And a lot of times those sort of movements are reflexes or whatever word you want to use associated with it. They're unconscious a lot of times, so people don't know that they're, they're there, which is why I think some form of testing can be helpful, right? So and RPR be activated, you can put people back into those positions, and then try to do some of the resets on them. You know, there's other modalities like EMDR, where they're trying to do lateral eye movements to

try to, you know, change the intensity of it. So it's probably multiple different ways you could address it to.

Warren Bartlett

Yeah, it's the list goes on. There's so many different pathways, you can take RPR I find either from all the ways we talked about today.

Dr. Mike T Nelson

Awesome. And where can people find out more about you?

Warren Bartlett

So my I work at plus eight, so can you contact the State Athletics Department. I also work at a gym called Fit focus in Laconia, New Hampshire. So you can look me up online there. Also my Instagram is Warren underscore workouts and see kind of the stuff I post there future research. See my workouts? Yeah, those are the main ways to really reach out to me and feel free to shoot me a message on you know, especially on any current research with acupressure. RPR, because I'll be doing a lot more on that. Yeah, any peer reviewed research on acupressure, would greatly be appreciated in potential physiological mechanisms. Maybe there's one I haven't heard. I'd love to hear more about that. I think it's what really advances. New topics like this is conversation, and networking.

Dr. Mike T Nelson

Cool. Awesome. Well, thank you so much for all your time today and sharing your research. And thank you so much for doing and performing all the research because I know that definitely is very time and tests intensive. And yeah, it's not an easy thing to do. So thank you so much for doing all that. We really appreciate it.

Warren Bartlett

Yeah. I'm glad to be here and glad to talk about it. Thank you.

Dr. Mike T Nelson

Thank you. Thank you so much for listening to the flex diet podcast here today. Hopefully you enjoyed our discussion on RPR, reflexive performance reset. If you have any questions or comments or anything, let me post this on the old social media, Instagram, especially, you can leave them there below. And I will do my best to get back to you as soon as I can. And shameless plug if you are looking for RPR to be taught at your facility, I do teach on occasion, if you can get enough people together, you could even request me as your instructor, and it's a lot of fun. I've been honored to teach it in you know, everywhere from around the US, North America to even as far away as Australia.

So it actually was really fun, you can get a lot out of just even the level one and level two over the two days. And you can go obviously to the RPR website, we'll have all the links below here for you to check out.

Today we're sponsored by the [Physiologic Flexibility Cert](#). So this is all the information that I put together on how to enhance your ability to recover, to be more resilient and just overall more anti fragile. Everything from breathing techniques to cold and hot pH changes such as high intensity intervals, and even your fuel system.

So we did a very deep dive on the use of ketones and carbohydrates. And along the way, we include some interesting supplements that can help you and different tips and tech Next. So it's not currently open right now, but you can go to physiologicflexibility.com Get on the waitlist and we'll provide you a lot more information in the meantime, and you'll be the first to be notified as soon as it opens. Thank you so much. Really appreciate it. Thank you to Warren for coming on here to discuss some brand new research on RPR. If you enjoyed this, please forward it on to somebody else. Thank you so much. And I will talk to you again next week.