



**Eccentrics, Negatives, and Advanced Overload Techniques Q&A
with Discover Strength's David Gschneidner (April 2025)**

Lawrence Neal: David, great to see you and thank you so much for doing this today. Really appreciate your time.

David Gschneidner: Of course, Lawrence, of course. Thank you for having me.

Lawrence Neal: You are most welcome. Everyone in attendance, this is *the welcome*, I guess, to the April 2025 High Intensity Business Masterclass. We do these every single month and we alternate between business and training.

Obviously, today's more training-focused, although you could argue that training is the business, and so it always overlaps. Previous Q&As and guests include Luke Carlson, also from Discover Strength, Jeff Tomaszewski, Pete Cerqua, Dr. Doug McGuff, Dr. James Fisher, and many more. Today's expert is Discover Strength VP of Operations, **David Gschneidner**.

[Discover Strength](#), for the few of you that may not know – I'm sure most of you do – are one of the most profitable personal training businesses on the planet. And in conjunction [with] exercise scientists, David has been heavily involved with negative training research.

And what I think makes you really special, David, is you have this rare insight into both the exercise science, but also the practical application of negative training on client results and client experiences. So it's like bridging that gap, right? Which is so valuable.

Everyone in attendance, David is extremely busy helping Discover Strength grow, a very fast - growing franchise. So we're very fortunate to have him for an hour today. And David, again, thank you for doing this.

And I think what we'll do is we'll just go straight into Q&A and everyone in attendance, obviously, I have questions here that a lot of you and others who can't be here today have submitted, but I



want to give priority to those on the call. So, let's go with your questions first. In fact, if it's all just like real-time questions from those on the call, that's actually better. And then maybe David will kindly give me some answers to the questions that we didn't get to after this, maybe on a Google Doc or something like that and we can publish it later, but David and I will talk about that offline. So, [if] anyone's got a question, please just hit the "raise hand" [button].

I'll let you speak, and you can actually be unmuted and speak to David. And what I'll do is I'll probably do a question and a follow-up for every person. 'cause sometimes it takes a little bit of back and forth to clarify the question. So, if anyone's got a question, please raise a hand. This is your moment.

Don't be scared. Have courage. Alright, cool. Here we go. It's James Brown. Okay, James, all yours.

James Brown: Hi. Yeah, thanks David. I guess I think from... I know Tom and you, probably lots of us have similar questions. I think it would just be great to hear how Discover Strength would... a typical example of how they would program negatives and not just for a little bit of a mixing in for someone, but maybe an older person — sarcopenia, bone density is their sort of priorities. How would you program a month or two's worth of training? What would the sort of plan be for negatives? How would it work?

David Gschneidner: Yeah, great question. So, we use negatives in a couple of different ways in terms of programming and programming somebody's 8-to-12-week program that they're gonna be on, we'll use negative-accentuated protocols, like a two-second concentric, ten-second each eccentric, we have a few different ones that we'll use though. Some of them are, if we have a one-on-one client, we'll use like a 30-30-30 protocol.

So, a 30-second eccentric, 30-second concentric, 30-second eccentric. To accentuate the negative, we have a number of different protocols that we would do in that way. So, from a



programming perspective, we utilize a lot of protocols that accentuate the negative. And we also use purely negative only, so no concentric at all — really heavy load, do eccentric only.

And then the other way that we'll utilize them is gonna be heavy negatives or extended negatives as an advanced overload technique after someone's reached concentric failure, which is generally appropriate for any population. I would argue from a... like some of the goals that he talked about specifically around bone marrow density and things like that, it's not a huge consideration for us as long as the load is moderate. At a minimum, so 8 to 12 rep load, we're seeing clients have improvements in bone marrow density with a moderate load. So, we don't feel the necessity for somebody who's maybe got osteopenia to jack the weight up super heavy and do like really heavy negatives, 'cause they seem to get really good bone marrow density benefits from a moderate load.

Lawrence Neal: Awesome. James, do you have a follow up on that?

James Brown: On the example you listed there, the eccentric-only, can you describe... I'm really curious about, I know I have to do that once, but how do you do it across the sort of 8 to 12 weeks? How do you progress? And do you never... do you do eccentric only every third time? Do you see what I mean? Or do you do it every time with an increase in load? I'm just curious about that sort of level of detail.

David Gschneidner: Great question. So, we're generally alternating between two workouts on someone's exercise prescription.

So basically, what that'll mean is that Every other workout, they might have a negative-only protocol for a given exercise. So, the way that we're programming is someone's gonna have 10 to 12 exercises and they'll have a different for a one-on-one. I'm talking about right now, groups are a little bit more watered down because you can't do as much with a group.



But let's just use one-on-one as an example. We'll have a different protocol for a lot of the different exercises that individual will have. And so, on a given day they might have a couple of negative-only or eccentric-only exercises, and we're progressing those like we'd progress any other exercise.

So, we have a goal repetition range that we'll use generally at 6 to 8 repetitions of 10-second eccentrics. The way that we're doing that is if they get 8 reps with perfect form, we're increasing the load. That's how it'll progressively overload it over the course of their program.

If they fall short of the goal range that we have set for them 6 to 8, then we'll reduce load. We have to be on the same page on what does that look like. But for simplest terms, I suppose it's a well-paced 10- second eccentric throughout the entire range of motion. And we're generally resetting the weight for them within 1 or 2 seconds.

That's how we're on the same page in terms of how to progress that and how to actually perform the exercise. And generally, that can be applied to any exercise that we use or any machine exercise that we use. There's some that. Are a little bit more challenging to administer. So, we maybe program those a little bit less, 'cause lifting the entire weights stack out on leg press for a strong male is nearly impossible. So, we may not program negative-only the leg press super often, but yeah.

James Brown: Amazing. Yeah, obviously that's... those practicalities are, I think, we would all aware of those, but that sounds great. It's more reps than I would've realized, more than I've been playing around with.

So that's really useful. Thanks.

David Gschneidner: You maybe alluded to this a little bit — we're not too terribly worried about someone having a negative-only exercise on one day, and then another one in a similar muscle



group. So, let's just say they did leg extension on Monday and then on Thursday they had a negative-only leg press.

We're just not terribly concerned that person's gonna be overtraining or anything like that. I think you get arguments from people in the high-intensity community that would be too much eccentric over the course of the week. And I come back to James Fisher... talking like James Fisher and James Steele — we had this conversation about overtraining and are we putting, too much muscle damage on somebody over the course of a week?

And to their point, it was... it's really hard to overtrain. It's really hard to overtrain. And you could argue that they maybe don't need that necessarily.

But they also are gonna be fine if we prescribe it. We're not gonna overtrain them. They're not gonna get rhabdo for some reason.

James Brown: Yeah, I'm not too worried about overtraining either. I'm just thinking about the programs. I had someone plateau concentrically and then switch them to negatives, and I'm getting more out of them.

But how hard do I push and do I... how often do you switch back to eccentrics and that sort of thing? But this is already food for thought. And of course you can I'm sure by the sounds of it, you mix lots of things in so that the different... not the whole session being negatives.

I'm not sure anyone is planning on doing that, but I wouldn't plan on doing that either.

David Gschneidner: And we rarely have clients go beyond... we did 20 workouts at a time, 16 to 20 workouts in a program. And so, if someone's trained twice a week, they're rarely going over 10 weeks before we're changing their programming.



So even if they plateau, they're generally not plateauing for a long period of time. Over the course of a 10-week program, it might be their last couple [of] workouts, they're trying to eke out an extra rep or two. But then, we can change their programming and generally that helps them start to see progress again.

James Brown: Yes. Okay.

Lawrence Neal: Cool. Awesome. James, you have some great questions, great answers, David too, obviously. So, James, hold fire, and you... I'm sure you'll get more opportunities to ask later. Morgan, it is over to you.

Morgan Maley: Hey. Thanks David — I would just like to hear a little bit more about the negative kind of accentuated treating with anyone who has maybe like a tendonitis issue. I've been reading about negative only and tendons, and I'd like to hear more.

David Gschneidner: Yeah, it's a great question. I guess part of my problem is it depends on how that tendonitis or how that tendon issue is expressing itself. I. So what part of the repetition is it bothering them from a range of motion perspective, but also the concentric or the eccentric? 'cause we've just, we've seen both when people are having tend issues where it just changes how we, it changes how we prescribe exercise, not necessarily from how we're using eccentrics perspective, but it's... so it's a little bit protocol, but it's more range of motion and weight that we're using to overcome people's issue with a tendonitis or something like that.

I don't have a great answer aside at tendonitis expressing itself. Where are they feeling the most pain and discomfort so that I can avoid that? And then we can use different protocols and different ranges of motion in different weights to continue to progress them. And largely, if we can get the surrounding musculature stronger and continue to do those exercises, the tendon health will improve.



But also any joints or yeah, mostly joint and tenant health that you're worried about.

Lawrence Neal: Cool. Yeah. Thanks. Thanks, Morgan. All right. Here we go. Mike MacMillan, you go, you're on Mike.

Dr. Michael MacMillan: Yeah, David, thanks for holding this. Obviously, it's an interest in my area. So I'm wondering... do you mean... I have two questions, and the first one is, do you mainly train your clients one day a week or twice a week, or three times a week?

David Gschneidner: Twice a week.

Twice a week? Do you... the follow up is, do you ever use post failure negatives as a one of the training methods if they hit a plateau?

David Gschneidner: Not necessarily if they hit a plateau, but we use that as a training method or advanced overload technique regularly.

Dr. Michael MacMillan: Do you think the addition of eccentric overloads could make one set once a week viable?

David Gschneidner: Yes. I don't necessarily think that doing heavy eccentrics is gonna give you a significant difference from doing traditional exercise within with an AOT. I don't know that there's any evidence to suggest that would be the case. I think there's some really unique and cool use cases for using heavy eccentrics or eccentric-only exercise.

But in terms of *would I use it as a reason why someone could just train once a week?* I don't necessarily know that there's anything to suggest that they're gonna get significantly better results than if they just had a hard full body workout using advanced overload techniques beyond that point, and frankly, advanced overload techniques... I don't know that we've proven yet that advanced overload techniques are making a difference either.



Lawrence Neal: Awesome. Mike, thank you. If you've got another question keep your hand raised or raise it again. David, or just to follow up on that: why do you continue to use advanced overload techniques, then? What's the rationale for you at Discover Strength?

David Gschneidner: Yeah, great question. That, and that's the... I feel like that's the question that all of our staff should ask us after they go through a little bit of continued education.

So, I really think there's two reasons.

Number one is getting to momentary muscle failure is very challenging, and people are really bad at predicting how close to failure they are. Proximity to failure. More research has come out to say that you can get close to failure and elicit all the same benefits as training to failure.

The problem is that most people are really bad at predicting proximity to failure. I think most recently, or one of the studies that we read was I. Individuals that were somewhat trained, I think they had over six months of training were on average off by five to seven repetitions compared to when they had a practitioner with them pushing them to go all the way to the point of, volitional fatigue or momentary muscle failure.

Anyways, people were really bad at predicting that. One of the benefits of an OT is if someone's psychologically, for lack of a better term, psychologically being soft and they're not able to push themselves to the point of failure, which a lot of people aren't, especially in our space, because we have a ton of people who've never strength-trained before, they have no idea what it feels like.

They could be experiencing normal discomfort that you would expect from an experienced individual, but since they've never trained before, we need to push them to the point of failure and probably beyond to make sure that they've quote-unquote, *truly reached failure*, truly elicited all the benefits.



The rationale is, if people are bad at predicting proximity to failure, just get 'em to failure and then you can rest assured that they got the full benefit out of what you're doing. And so, we would do an AOT to make sure that they weren't faking failure, they weren't just uncomfortable. We can be sure that they were truly at the point of failure, and we got max muscle fiber recruitment.

So that's argument number one, is maybe people are leaving meat on the bone. We can make sure that they don't.

And then the second reason that we use AOTs is because there is something to and I – this is not a maybe necessarily a statement based off of research that I've read; this is more from the experience that I've had – your ability to retain clients by giving them a workout where they walk out the door and they feel like they have nothing left, there's something psychologically that happens with them, where people are like, I... they love the feeling of leaving the tank completely empty and feeling like there's nothing left. They walk out like with that high kind of after their workout.

When we don't push our really intense clients to that level of intensity, there's a very high likelihood that they will leave us and work somewhere else, whether that's because of the feeling that they're getting afterward, or they think that if I'm not, if I'm not putting everything I can into this I'm gonna go to a place that is gonna push me that hard.

Some of that is a lack of understanding that they don't need to do that. But at the end of the day if our consumer is saying, *I want to be crushed*, 'cause I feel like I've gotten everything outta the workout we're gonna deliver on that whether it's physiologically like necessary is I would say unnecessary at that point.

Lawrence Neal: Great answer and good luck trying to find something more intense than a Discover Strength workout. I'll tell you that. All right. So, Logan, over to you.



Logan Bayless: Hi, David. Yeah, I just wanted to ask, what criteria would you look at in a client that would make you determine that eccentric-only protocol, whether that's for one exercise or part of the regular programming, would be appropriate versus just the standard concentric to failure?

David Gschneidner: Yeah, great question. So, I would say a couple of things: Largely I would say it's applicable to any of our clients, but I think the two. Considerations would be that it's really opposite ends the spectrum for me mentally. So, you have a really intense client who like mentally is not gonna be intimidated by a really heavy load.

So I would really not recommend – and I think this is common knowledge amongst the people, at least on this call – not doing negative-only heavy eccentric work in someone's early experience with us. Like I don't think that we should have my mom. She's 65 years old. I think we should have my mom in her first three months of training with us doing heavy negatives or doing eccentric only, right?

I do think there's a certain amount of being a little bit more of an advanced client and also being comfortable with really heavy load that is one end of the spectrum for our really intense individuals who are delineated by, are they training to eccentric failure? Or are we using it because they have a cardiac condition where we can't get their heart rate jacked up super high?

And so we're almost – stick with me here – we're almost using eccentric-only training to get them to concentric failure. So, I'll try to explain both of those. So, the eccentric failure one is like we're taking somebody who's a really intense client and we're getting them to the point where they can't lower the weight anymore.

That is a unique feeling when you're like, you have nothing left in the tank. It's super metabolically challenging. When you can't lower yourself or lower the weight in a controlled fashion anymore, that's a super intense version. The other version that I would use this with is we have someone



who's coming off of a heart condition and they need to make sure that they don't get their heart rate up super high.

And we know that the concentric part of the repetition is really what's more cardiovascularly demanding. And the eccentric is really helpful from a strengthening perspective. So, can we utilize negative-only protocols? Where they're not getting their heart rate jacked up, but by the end of the set, maybe the first five or six reps of the eccentric only are pretty sub maximal.

Like, they could lift the weight each time on each one of those borders. Not gonna have them do it by the eighth one. Can we make it just heavy enough that if they tried to lift it, they wouldn't quite be able to lift it? Like they could move it a little bit, but they wouldn't quite be able to lift it.

Because the outward expression of that when I'm watching that client train is they don't look like they're insanely challenged, which is the goal. So, it's a great way for me to have a heavier load and get them stronger without having the cardio aspect of how challenging it is from a concentric perspective.

Those are like the two use cases that I really... is super intense client that we're getting to the point of eccentric failure, but then someone who have to be a little bit more gentle with using negative only once again, almost to the point of concentric failure. Sorry if that's confusing, but that's the way that I think of the use there.

Logan Bayless: That's great. I appreciate that, David. Just a follow up question: You mentioned, like centric failure. Would you determine that as when maybe the client can't lower it? Under four seconds if they just go into a free fall pattern, or where would you cut the set off at that point?

David Gschneidner: Yeah, great question. So, I'm thinking of all this in the context of our protocol negative only is always a ten second eccentric. Okay. So, this would be their inability to control it for 10 seconds on the eccentric. And sometimes... basically out of nowhere since males are



so fast-twitch dominant they just drop off a cliff, they'll go from one rep being able to lower for all 10, even though it looks really challenging to all of a sudden may just drop the bottom on the next rep and be like, alright, we're done.

We're... some females who maybe aren't as fast-twitch dominant off minute that are able to control it for seven seconds. And we're like, all right, we're done there. You can't get the full 10. So that would be the delineation though is when you can't have a perfect 10 seconds. We would shut it down.

Logan Bayless: It is a unique feeling to hit that point where you really just can't control it. Definitely an intense technique. So, thank you David. Appreciate the answers for sure.

Lawrence Neal: Awesome. Thank you Logan. Great questions, giving me some flashbacks, some nightmares of DS early morning workouts on the chin up during a... what was it?

Yeah, chin up with weight into like body weight, negative... horrific after obviously everything else, of course. Pete Cerqua...? You're good?

Pete Cerqua: I'm good. Good morning. Good morning, David. Great to see you. Great to see you. I'm thrilled to learn that I am the same age as your mom.

On a more serious note, David, you must run into a situation where the exercise physiologist, the trainer, is not... negative-only must be new to them and new to the client. How do you instruct the trainer to introduce negative-only on any of the protocols to a client who's never experienced this?

David Gschneidner: Yeah, great question. So, my short answer is that trainer would never be the one to introduce it. They're gonna have to be the one to probably execute on it.



Generally speaking, our new staff are not gonna prescribe a client who's never done negative-only before they've experienced it and know how to administer it.

So, a lot of times they're gonna be coming in fresh and have to administer negative-only. Someone else prescribed it for that client. 'cause we have a shared client model where you are gonna train anybody who's coming in for their workout that day and that workout might have been prescribed by a super veteran and you're in your first month of training.

So, we have to make sure onboarding is robust enough that you know how to execute all of the different protocols. So that's one side of the answer.

But then, once they are working for us, it's really important that we have our staff basically practice what they preach and do as many of these protocols in their own workouts as they possibly can, so that they understand this is how it feels when doing this protocol.

And so, I can speak to that when I'm working with a client.

Obviously, if they're coming in their first month and they haven't experienced that before and they're putting a client through it, who that had it prescribed to them they're more executing it, but they're not probably doing a great job of teaching around the value of it and why it was prescribed and all of that. They're more just doing the workout with that person. So, it's a great question because it's something that we really preach hard with our new people. It's like you gotta get your own workouts in and experience these different protocols because before you, until you do, you can't provide the level of nuance in your coaching that we would like you to just because you don't know exactly what it feels like.

Pete Cerqua: Hey, David, that, that was great. Just one follow-up. What [about] specifically for a client like the same age as me and your mom? How... what's the gentlest way to introduce negative-only? What protocol would you use or how would you go about that? And obviously



when people get above 50 and 60 years old, you really don't know their sensitivity to negative-only... it could have an extreme effect on one person and not that much on another.

David Gschneidner: For sure. So let me just clarify: are you referring to negative-only, like the way I describe the protocol of literally eccentric-only or just negative-accentuated type protocols?

Pete Cerqua: Either. What would you recommend to introduce a client to any of the negative emphasis, negative-only gently for the first time?

David Gschneidner: Yeah. So, it's interesting because we just put them into it. We prescribe negative-accentuated protocols for them over their course of their first couple of workouts and in my experience, there's a massive difference between a negative-accentuated protocol and negative-only as a protocol.

So, negative-only being, once again, increase the load by 40% on average. Sometimes it's 30, sometimes it's 60, but increase the load and do just negative work. It creates way more DOMs, way more muscle damage.

And that's something that I'm not gonna throw a new client into. I'm not gonna throw my mom into... I want her to be more well-trained, more advanced. I'm not worried... like we don't notice a very big difference or really any difference at all between doing a two-four cadence, which is our standard cadence. Two-second concentric, four-second eccentric. We don't notice a difference between that and doing a 2-10 protocol in for 2-down for 10, both of them taken to the point of muscle failure.

Like, we just don't have clients that report a massive difference between those two. We prescribe those right off the bat, but it's more of a matter of making sure in the first couple of workouts, especially if somebody's new to strength training.



We might not take them to the point of muscle failure. It might take us 2 or 3 or 4 weeks for us to get them there. Because they're so new to it and we don't want them to be crippled when they walk out their first couple workouts. So, while we try to cripple Lawrence, that's not the approach that we take with someone maybe who's brand new to strength training and brand new to us.

It is a little bit more of a slower approach with those individuals, but we're less worried about the protocol, more about are we taking it to failure and doing a bunch of stuff after failure that would potentially crush that person like it?

Pete Cerqua: Thank you so much, David. I appreciate it.

David Gschneidner: Of course.

Lawrence Neal: And can I just say, incredible humility from Pete Cerqua who's been doing... just as we know, there are so many people in our space who aren't humble and aren't open to learning. And Pete's been doing negative training of clients for 20 years. And he's still open to learning. That says a lot.

David Gschneidner: Yeah, 100%.

Lawrence Neal: Yeah. Awesome. Michael, is there another question [from] you?

Dr. Michael MacMillan: When you speak of accentuated negative. what does that mean in practical terms to you?

David Gschneidner: Yeah. To me it's a slow... basically for us, the application of that would be an eccentric that's longer than four seconds. I would argue that 2-4 is probably technically accentuating the negative because it's longer than your concentric.

But I think we're getting a little bit nuanced there, but...



Dr. Michael MacMillan: ...and we often talk of eccentric overloads. Does that have any specific meaning for you as well?

David Gschneidner: So eccentric overload, I would think of it in probably one of two ways: It would either be a long extended negative used as an advanced overload technique or heavy eccentrics.

Those would be the two things that would come to mind if I heard that.

Dr. Michael MacMillan: In my world we... it's a little bit different. Accentuated negatives are actually in increasing the amount of negative weight above your one-rep max. So that's just a different way to accentuate it.

David Gschneidner: Yeah. Yep.

Dr. Michael MacMillan: And to the point, especially with the comment on tendonitis, the... I think eccentrics are very valuable for the... not the treatment of tendonitis so much, but the prevention of it. And by using – initially – sub maximal eccentrics, and then advancing that to maximal eccentrics. and then doing the heavy eccentrics in a progressive fashion, like you should do with all resistance training, that you can develop a tendon that's more resistant to tendonitis.

David Gschneidner: Yeah, that's great.

Lawrence Neal: Awesome. Nice one, Mike. Okay, so any other questions people? I've got a question here where somebody can't suddenly be here today: Is there a difference between helping the client lift a heavy weight and helping them lower it by themselves versus giving them a manageable weight and modulate the negative with manual resistance?

David Gschneidner: Yeah, it's an interesting question. As far as that person's muscle is concerned, we like the old terminology of *your muscle doesn't have eyes, it's responding to*



tension. So, theoretically there shouldn't be a huge difference as far as that muscle is concerned of *if I increase the weight by 40 pounds or if I add 40 pounds of force with my hand*.

Obviously, the big difference there is if you wanna be really diligent about progressive overload, You're probably better off actually tracking the weight, but I don't think there's anything wrong... I will... I would only recommend, though, using manual resistance on the eccentric as an Advanced Overload Technique and not as a protocol that I'm programming into somebody's into somebody's workouts for the reason that I shared already.

It's... I wanna be able to progressively overload you. And if I don't know how much load you have on the eccentric every single time, that makes it more challenging for me to understand. What does the weight need to be next time? If you have the ability to, I would try to progressively overload them with weight, but use manual resistance on the bar for an Advanced Overload Technique, which I think is awesome, by the way — super tough.

Lawrence Neal: Awesome. Thank you. Yeah, great answer. Okay. James Brown, again with a great question.

James Brown: Thanks. I've just seen an opportunity to dive even deeper. You've already answered some of the other questions I had. But... you mentioned 40% as a possible eccentric overload calculation, but that's 40% more than they had in their last week's program where it was concentric work to failure.

Do you have a... but you mentioned there's other 30% or 60%. Do you have a guide, if you... like, for maybe the difference between the slow and the fast-twitch people? How heavy? What percentage of people's one-rep max are they working to concentrically? What's the range of that answer?



David Gschneidner: Yep. So, we're generally recommending it based off of what is their weight that they use for 8 to 12 repetitions to failure. So, that's our standard protocol, 1 by 12.

So, if I'm gonna then transition you to this protocol of negative-only, which is 6 to 8 reps with a heavy eccentric load, that's where that 40% conversion comes in. So that's our ballpark on what we're gonna increase the weight by. Now, the 30% to 60% range that I throw in there is more of a ballpark on if I'm using it as Advanced Overload Technique. I might choose different percentages that I jack it up by.

So, I've done [this] before with a really fast-twitch male. At concentric failure, I'll go like one 10 or 15 second eccentric, but I'll go 50% to 60% heavier depending on the exercise. There's so much nuance in this because I can do that on a leg extension, but I might not be able to do that on like our specific pec fly, right? Like, you have to know your machine on how much you can increase the load by.

So the reason I give a wide range of percentages is mostly because depending on the machine, I can jack it up more, or like [on a] leg extension, I find, on MedX's leg extension, you can make it really heavy with a fast-twitch dominant male and they can get a 10 or 15-second negative at the end of concentric failure, but I might not be able to do that with some of our females. I might have to go closer to 30%, and they can maybe handle a little bit longer, but they can't handle quite as much load.

So once again, a ton of nuance in this, but [the] general rule of thumb for us is take their 1 by 12, multiply it by 45%, and then obviously adjust weight accordingly based on how they perform that first time.

James Brown: Yeah. Brilliant. Okay. So, maybe a little follow up just thinking about that: I've got a MedX Knee Extension and people picked in the early stages of their training. They hate it. It's torture. Are essentially rated... are these negative-only sort of... Better? They're not getting to



failure on it because it just psychologically is difficult — is that why it's more likely that you'll do something like this big, single, slow, eccentric? Is it easier to tolerate, do you think?

David Gschneidner: After the point of concentric failure when we're utilizing it, no. You can maybe make the argument that the negative-only protocol of them not doing any concentric would be psychologically easier just 'cause you do get a small rest when the weight is resetting to the top where you get a little bit of relief from the burn.

There may be a case where if someone is in such extreme amounts of pain, you could transition to a moderate load, eccentric-only... once again, not trying to get... if that person's too uncomfortable to do a normal set on it, they're probably more down the side of the spectrum of them use *negative-onlys* to get them to concentric failure, not so heavy that they're going eccentric failure... 'cause that's as uncomfortable as it gets if you go super heavy and get them to the point where they can't even lower it anymore.

So that's how I would use that potentially with those folks.

James Brown: Yeah. Brilliant. Yeah, I really understand. I really think I got that, what you've described as using negatives to get to concentric failure. And you mentioned about heart conditions. I've got asthmatics where I think the same thing applies. So that's very useful, thanks.

Lawrence Neal: Alright. Just a high-level question, David, from me here, what... I know you... obviously, you've talked about a lot of the details and nuances and negative training... are you able to share like, maybe, some key principles that you use at Discovery Strength when it comes to negative training? It's probably gonna touch on much of what you've already said, but just a framework through which you guys think about how you use it with clients? Like, your rules or your criteria — do you have anything like that you can share that might be helpful for the members?



David Gschneidner: Yeah, it's a good question.

Lawrence Neal: Or hacks.

David Gschneidner: Yeah, I dunno about hacks. We have the recommendations of how much, how different the weight should be on different protocols.

Largely, most of our staff come in with an understanding of, during their onboarding, that we're gonna utilize every protocol in our exercise menu, which I think we have 30 different protocols. And of those, most of them have a longer eccentric phase that's associated with them.

And they understand that, I largely wanna apply these to provide a variety of stimulus to our client.

Once again, there's nothing to suggest really that if they do a negative-accentuated protocol versus a standard 2-4 cadence – like all of our different protocols taken to the point of momentary muscle failure and any AOT – is gonna give them the same strength hypertrophy, health benefits as any other protocol, generally speaking.

And so, we don't have super strong principles because I think it'd be intellectually dishonest for us to tell them. This is gonna be better for this and this is gonna be better for this outside of the use case of this person has a heart condition, or to James's point is asthmatic. We need to make sure that we're not jacking their heart rate up.

So, let's focus on the... this kind of subset of protocols that we can use with this person. And then, outside of that just general use of protocols, there is a big consideration for an understanding of how the resistance curve on the machines that you're using – how that jives with the protocols that you're selecting.



And so, if you're using a negative-accentuated protocol, do you have a machine that has a tremendous increase in load on the second half of the range of motion that's gonna make it super challenging to do ten second eccentrics and you're better off having a slightly quicker, eccentric, for example?

So, there's some exercise that we might say, depending on what that resistance curve is, it may not be the best exercise. but yeah, outside of that... I don't have great ones.

So, like an example of that might potentially be, we're probably not gonna do negative-only barbell bench press. We have a barbell bench press at our Minneapolis location. I would prefer not to do negative-only barbell bench press with somebody 'cause they're gonna drop the weight on the second half because of the moment arm.

So, I hope that's helpful. But yeah, I don't have great rules of thumb outside of 40% heavier for that negative-only protocol.

Lawrence Neal: In lieu of hands being raised, I will ask a follow up — so, there's a couple things there where you're talking about... I guess a better question would be like, what is the... where's the key utility in negatives in trainings?

And what I'm hearing for you is it's a tool in toolbox: helps with variety, helps with, like you said there, if a client's got a heart condition, you can adapt, you can use a negative protocol to make the prescription more, more kinder to the heart rate, and utilizing and being mindful of the resistance curve on... I'm curious, is there — 'cause obviously, the resistance curve in machines is certainly enormous in MedX — the strength curve, sorry, would be quite good. And is there any other examples where you might have to modify how you use negatives in any machines that come to mind?



Barbells, [obviously], I guess, but is there any others where you're like, okay, we can't really do it on that. It doesn't really work for everyone in that context. Any others that come to mind?

David Gschneidner: Yeah, great question. So, another one that's pretty challenging for us to deliver it on would be like a Nautilus Adduction, because it's really hard to get leverage as the trainer — like, you can perform that exercise, but like, it's really challenging as the trainer to perform negative-only as a protocol on adduction.

It's also very challenging on leg press. So, if my normal leg press is 300 pounds and I now have to go 40% heavier and go 420 and I wanna do eccentric-only, how the hell is one trainer gonna be able to lift the weight out for that person and do negatives?

So, there's somewhere it's just like it's not practical for us to say, “all right, everyone at this location who could potentially train this client has to be able to lift 420 pounds on their own for negative-only leg press.” So that would be once again, a case where it's like, “all right, we could do that, yes, but it's pretty challenging to actually administer”.

So that would be one on a machine that I would largely recommend our staff don't do. And also that that adductor... like adductor, if they have a really heavy load, it's pretty hard for a lot of our female staff to bring it all the way into the middle and every single rep for that person.

So that's where I would try to employ a... what we would call a negative-accentuated protocol where they're still doing the concentric, but they just have a significantly longer eccentric phase.

To come back to your question on, like, utility of eccentric, like obviously the utility of eccentric is that's where you're getting the majority of your strengthening benefit from. That's a lot of muscle damage that you're recovering [from] and rebuilding the muscle stronger is coming from.

So, there's massive utility in making sure that you have a eccentric phase that is controlled and that it's frankly longer than your concentric.



But outside of that, there's a lot of ways to slice that up that are gonna give you great benefit from a strength and muscle size perspective.

Lawrence Neal: Yeah, agreed. Cool. And just very quickly as well, a question that was submitted: are negative training protocols effective for body weight virtual training as well? I assume you'd probably say yes, but where... can you perhaps elaborate on where you're using negatives in virtual training with clients?

David Gschneidner: Yeah, absolutely — the exact same way that we're using it in studio. It's just gonna be considerations on how *doable* is it for that client to get into the position where they can do an eccentric.

So, what I mean by that is if they have a chin up bar, are they able to actually get to the top of that chin up bar easily to do an eccentric protocol? Or are they, like, jumping and trying to catch themselves to the top? Like, obviously, that's not a terribly safe way for us to train somebody virtually using a negative-only protocol. So, it does limit the number of times where we would use the eccentric-only training because it might not be super safe or viable for them to do on their own to get into that initial position.

But outside of that, we use a ton of... like I said, negative-accentuated is our terminology for it, but where they will still do the concentric but do significantly longer periods of time in the eccentric phase.

Lawrence Neal: Yeah. And just... go ahead, David. Sorry.

David Gschneidner: I was just gonna say we use those a ton in the virtual setting.

Lawrence Neal: Interesting. Just to share a very quick experience: I've been training a local lady. I have one client, near where I live and it's — I won't bore members with the details of how this all came about — but a friend of mine and also like a mentor... and I've been training her at home



and she's in quite good shape, but definitely could increase her strength significantly with this training.

And she couldn't do... we checked this, if she can do a concentrate chin up, right? And she couldn't even do the first half-inch when we first started.

In just three workouts using isometric — so holding herself at the top, then doing negatives to the point where she can't lower herself with control within ten-twenty seconds — in her third workout, she could do one concentric chin up. She's 65 years old.

David Gschneidner: That's wild.

Lawrence Neal: The transfer, I was I was like, she did it and she's, "Oh, that's probably what you expected." I was like, "yeah, that's what I expected. No, like that I did not expect, be able to do that." That was incredible! Especially, her age and just how long I thought it would take for her to be able to do something like that, so that was amazing.

David Gschneidner: That is amazing. She's gotta be a high responder to resistance exercise. That's wild.

Lawrence Neal: Yeah, and I think she was training every two weeks with me not doing her training in between. So, just still... like, to be able to respond so well to us from low frequency...

All right, Mike... so over to you, Mike. You're on.

Dr. Michael MacMillan: I'd just like to just mention one other special case of that and that's the lumbar extensor muscles. Looked into extensively and was a realization of mine that they function primarily eccentrically.



I tell people, if you ever watch somebody do a deadlift their low back doesn't change. It remains a fixed length with this huge load on it. So, it's resisting the load. And the other thing that's important is that the strength curve of the muscles is very strong in the extended position, but very weak in the flex position.

So, it doesn't make for a application of a full range of motion eccentric overloads to put some in the lumbar extensor machine, excuse me, and have them flex forward with a heavy weight. Our resolution to that is that there's an Australian group that uses this a lot called yielding isometrics, and that is really a form of eccentrics where you estimate or calculate the one-rep max of the patient, put them in the machine, and assist up with the amount of weight that you've calculated and then had them hold it there.

The length of time is really not determined, but we use 30 seconds and then have them hold it there for 30 seconds in the... with the maximal or super maximal weight, and at the end of 30 seconds, have them lower back down with assistance so they don't have the same weight in the flex position. So I think that's a safe...

David Gschneidner: And that's a hold in the extended position, Mike, is that correct? ...or in the mid position?

Dr. Michael MacMillan: Try to avoid loading in the flex... flexed force is dangerous to the spine.

Lawrence Neal: Thank you Mike. Okay, so we're gonna go to Pete probably for potentially the final question, maybe one more after Pete. So, keep that in mind guys, if you wanna raise a hand. Pete, you're on.

Pete Cerqua: David, do you have a favorite protocol and a negative-only protocol or a negative-accentuated protocol?



And do you have a favorite exercise, as a go-to for yourself where this is just something you could pull outta your bag at any time and really give it to 'em?

David Gschneidner: Oh, okay. So, I have a sequence that I like to do at the end of a workout that will wipe the floor with anybody. So, I will get to that. The first part was protocol. Is that correct?

Pete Cerqua: Yeah. What's your favorite way to use this? Your favorite way and favorite exercise.

David Gschneidner: So, my favorite way to utilize eccentrics and heavy eccentrics would be as an Advanced Overload Technique at the end of the set.

I absolutely love... with our most intense clients, if I wanna nail the intensity of our most intense clients and make sure that I hammer them home and they're gonna walk out heel in grates, it's three to four heavy eccentrics. I could do that on every single exercise, and it would nail their intensity. If I basically had that and assisted reps, I feel like I could crush anybody.

Favorite exercise to use it on is leg extension, 'cause people are super strong on leg extensions. They can handle a lot of load. It's really uncomfortable. They can barely walk afterward. They like, feel the benefit of it. And it's not like terribly hard to administer.

But it also depends on who it is. If it was upper body, I would go chest press — MedX Chest Press, 'cause you get a lot of dudes that would rather load up the weight there and feel like a beast on chest press versus leg extension. So those would be my two.

And then sequence that wipes the floor with anybody if I wanna make sure that they crawl out: It's... and I think this might be a Darden... it might be from [New HIT](#), but I don't remember exactly: 60-second eccentric chin; as many pushups as they can muster with good form; 60-second eccentric chin, just back to back. No AOTs involved in any of those. That's at the end of the whole workout.



Pete Cerqua: That's awesome! Anything. Dr. Darden is awesome.

David Gschneidner: I agree. Thanks Pete.

Lawrence Neal: Yeah, that last sequence made me want to vomit a little bit, to be honest. Awesome.

Okay. Any final questions guys before we wrap up here?

We're almost at time. David is extremely busy, so it's probably gonna be some time till we get him back on again. So, if anyone's got any questions, this is now the time I'm seeing what else I've got here...

Forgive me if you've answered this, David, I'm hosting and listening... do you limit how long, like how many sessions in a row a client will do?

Like negative only...? Yes. And if so, how many sessions will you limit if indeed you do limit it?

David Gschneidner: Yeah. So, the short answer is no.

We'll prescribe it into their normal set of workouts. But we... if we're... 'cause we're always checking in on how they're acutely doing. If we have somebody who's not recovering very well in between workouts after being on it a couple weeks, right? Like, the first couple weeks is just so novel that they're probably gonna be pretty sore. But if we're two, three weeks in and they're still having a hard time being recovered for the next workout, we may make the decision to change their programming. And that's very person-to-person, depending on what their recovery ability is.

That would be yeah, how we prescribe it and maybe make changes if needed.



Lawrence Neal: Yeah. And oh, and also just to follow-up on what you said earlier about the leg extension... leg extension is probably, you could argue the most uncomfortable exercise maybe 'cause the burn you get in the quads...?

David Gschneidner: Yeah. To me it, it's that or low back or in terms of just discomfort, those are probably my top two. Yeah.

Lawrence Neal: And I can see real utility in, even for myself, that being said, if I'm doing a Discover Strength workout, I'm going to concentric failure on the leg extension, 'cause I don't wanna look like a wuss in front of you guys, but if I'm training by myself, actually then it's impossible 'cause who's gonna put me in the negative?

But I can see how – for a client who really struggles to get a centric failure on a leg extension – being able to lift those heels, get them up to the top and just get them to that point, is extremely valuable in that particular exercise, I think. Do you notice that among your clients?

David Gschneidner: So, I simultaneously agree with you while we just don't see it much, like, most of our clients just do the exercise I think there's maybe some peer pressure that like, there's other people in the room that they're like, okay, everyone else does this, so I'll just do it as well.

So, it's very... it's pretty rare that we would change their protocol to that because of discomfort. Largely, our clients will simply do as they're told in that exercise,

Lawrence Neal: So what you're essentially saying is your clients are all tougher than me, which is totally fine!

David Gschneidner: No, not at all! I just, it just doesn't come up as much and I don't know necessarily why, but they generally just proceed with the exercise.

Lawrence Neal: Amazing. The power of supervision, eh?



David, this has been extremely valuable. Thank you so much for making the time. Just so everyone's aware, we've got a document in the community, which is like a strength studies Google Doc, and it's really cool because it's like all the studies in strength training, all the best ones that I know categorized into, like disease, strength, hypertrophy, brain health, et cetera.

And in there, and if not in there, we'll make sure they, they get added. We'll have all the studies that Discover strength for David was involved in regarding negative training. Did a few collaborations with Dr. James Steele and James Fisher. So, we get those added if they're not already in there. So just if you just search in the community strength studies, strength training studies you can find that document.

It's super useful. And if you wanna find out more about [Discover Strength](#) just go to [DiscoverStrength.com](#). If you're interested in a franchise, go to [DiscoverStrengthFranchise.com](#).

David, any other asks or things you wanna point to?

David Gschneidner: No. No, that's it. I really appreciate you having me on. I'm humbled, Lawrence.

Lawrence Neal: Thank you. No, I really appreciate your time and thanks everyone for being a member. And next month we're probably gonna do something with Pete Cerqua on leads, generating leads. Pete, yeah. I'll talk to you about then a bit. All right. Nice one. Thanks David and have a great rest of your day and we'll talk soon. Really appreciate it.

David Gschneidner: You too. Appreciate it, Lawrence. Take care.

Lawrence Neal: Take care.