How to Choose The Right HIT Machines for Your Studio with Mike Petrella (June 2025)

Lawrence Neal: So, welcome everyone to the August 2025 High Intensity Business Masterclass. We do this every month… can you believe it? We've done this every month for probably about seven years, I think. It feels not accurate, but I'm pretty sure it is.

We tend to alternate between business and personal training. Obviously, there's a lot of overlap. One month we might focus on hiring and marketing and lead generation and stuff like that.

And then next month it's more about the technicality of delivering a great workout, personal training skills, that kind of thing, right? Or exercise science, even.

So, previous Q&As and Masterclasses would include – Mike's done it, plenty of them before; Obviously Pete, you've done some; Luke Carlson's done plenty – Jeff Tomaszewski, Dr. Doug McGuff, Dr. James Fisher. We try and bring the best names in High-Intensity Strength Training to help you grow your business.

And today's expert is none other than owner of STG Strength and Power, Mike Petrella.

Mike, thank you so much for making the time. You're extremely busy with a 2-year-old and a thriving business or slash museum that we all envy. So, I really appreciate you making the time and I loved, by the way… I just realized you were on Mutant TV, which is like a big YouTube channel with a bodybuilder called Big Ron who's got a thing called a show called "Mutant on a Mission".

And I wanna just recommend it to everyone watching this to go check it out because you take him for a workout, you showcase the gym, you showcase all the equipment. It's just really cool and it's obviously really well produced. So, I'll put a link to that in the chat and we can put a link in the post for this afterwards as well.

So, today's plan is going… we're gonna start off with a short sort of presentation from Mike on the seven tips for choosing the right machines for your strength training business. So, we're gonna run now for about, sort of 20 minutes or so. And then straight after that, Pete's gonna share his insights.

Pete might have some questions for Mike as well. Pete's gonna kinda share his insights on how he might integrate those machines for a maximum return on investment in a strength studio concept. And that's gonna run for about five or 10 minutes, so that'd be quite short. And then after that we'll get into some Q&A.

So obviously we'll prioritize Q&A for the attendees. I've got a few questions as well. I'm really gonna spend the last 30 minutes just picking Mike's brain – I hate that expression, but I couldn't think of something else to say – asking Mike questions to learn as much as we can about utilizing machines the best way in our studios, acquiring the right pieces, doing that in terms of buying the right pieces and not spending too much money and trying to be conscious of that stuff. And that's what we're gonna do today. So, thanks again, gents, really appreciate your time. Appreciate your time, Pete, as well.

So, without any further ado, Mike, can I hand over to you and you can take us through seven tips for choosing the right machines for your high-intensity training business?

Mike Petrella: Absolutely. Thanks for having me on. Lawrence, always a pleasure to talk with you and good to see you Pete, as well.

So, I find that **the very first thing** that always has to be considered **is cost** — that's always your number one thing.

Unless you have some sort of unlimited budget for this stuff, cost is, has to be up at the top. And the major thing is whether you're gonna go new versus used.

Now, if you're getting started, more than likely you're gonna look into the used market because just like a used car, you're gonna probably buy it on average, 50 cents on the dollar.

So, it's really nice to buy brand new equipment. You get whatever color you want. Normally there's a good warranty that comes with it, and it is a nice option if you have the capital. But more often than not, I look for people to get good quality used equipment.

And I know Pete's done some podcasts with you where he's discussed that a little bit too, where say you have a hundred thousand dollars that you know, that you get to play with for everything to do with the gym you can spend that whole a hundred thousand on equipment no problem. And then you got nothing for anything else.

But actually, I've seen Pete post some stuff on Facebook just in the last couple months where very nice circuits of 10-to-14 pieces in that $10-to-$20,000 range. That's a nice price point. It's gonna give you everything you need. So, cost, and more than likely starting off with used equipment, and then you work up from there.

The second thing I'm gonna look at **is** – more often than not – **space** is an issue when we're beginning.

Not too many people have 20,000 square feet or something larger than that to go with. A lot of people in, I would say, the viewer-slash-listenership for you, Lawrence, is probably around a thousand square feet. For some people, that's big. For some people that's a little small.

So, I like to look at pieces that have multi-use. Even just a very simple power rack, you can do a lot out of it. Having an adjustable bench with some dumbbells like PowerBlocks, you can do a lot with it. I'm a big fan of having a good cable system.

Something like the free motion… like a double-axis machine where you can move the movement arm bolt through the X and Y axis gives you a ton of a ton of variability and a ton of exercises.

Lawrence Neal: Could you give us an example a machine that has that capability? Just so I can picture it.

Mike Petrella: So, it's called… the original one was made by Freemotion and it is called a Dual Axis Machine. So, it's like a cable crossover, but it has movement arms that move in like an up and down and left to right motion. So, it just gives you more options. The cable crossover will still work fine.

(Editor's note: the Freemotion Fitness machine that fits Mike's description best is the one officially labeled the Dual Cable Cross).

Now, as both of you know that I'm a big fan of machines and quality stuff, and I'll get to that in a little bit.

But you could run a very successful gym with a functional trainer, like a multi-cable machine, a set of dumbbells with an adjustable bench, and then some sort of a squat rack.

We've become a fan of Smith machines. I bought a really nice Smith machine in the last year and I find we use it a lot. And, actually, for the average person, I like the Smith machine a little bit better than a free-weight barbell. I think you get a lot of benefit from it, and the average person can do, say, an incline barbell press on a Smith with better control and better feel than they can with a barbell.

So, just with the very simple pieces, and then something like a multi-exercise from Nautilus. A lot of the facilities already have them, but again, with a couple of attachments, you're doing 12 to 14 exercises from one piece that fits in a corner. You can do a lot with a little if you get some multi-use pieces in your facility.

The third thing that I like to look at – and this becomes again very important for most of the personal training people that are in our space – **is footprint**.

There are some excellent pieces that are the size of a boat. There're also some excellent pieces that when you get them in, you're like, "Holy crap! this is just a fantastic footprint."

And again, unless you have all the space in the world, footprint makes a big difference relative to the square footage you have.

So, I'll just give you guys an example of a machine I just picked up. I got a 2ST Nautilus Hip and Back. I think *hip and backs* are quite important, and I'll get to that a little bit later in the podcast.

I was using the Pendulum version as our main hip and back, and it is a very large machine. It's a very good machine, but it's large. And when you incorporate the fact that it has horn loading for both storage and the actual movement arm on both sides, this machine is almost five feet wide and it's almost as long too. And then you have to have the movement arm move into an additional space because you have someone's leg sticking out of it. So, it takes a lot of space.

The Nautilus version has a weight stack, so that instantly cuts the width in half because we're not loading horns anymore. It's more efficient and when you see it, it's about half the size. So, it gives me all of the benefit of the Pendulum with half of the square footage.

And even – I'm fortunate, I got a relatively large facility well, compared to most people that just do personal training – and that piece, bringing in, I have the exact same motion on the floor. It allowed me to put two pieces in where one used to be.

So, I'm a big fan of looking at the size of some of these. Even a lot of people think the MedX Avenger is the best leg press made, and I don't disagree with that, but it's a very large piece. Whereas you can get a Nautilus Nitro leg press. And it's not quite as good, but it's still a very good leg press. It's a good quality machine. And again, you're looking at half the square footage. You have a weight stack, which makes it easier when you're doing a high volume of people.

So, I like to always consider these things when I'm buying a machine. In general, I'm trying to buy a selectorized version over a plate-loaded version when possible.

There're some very good pieces that are only made plate-loaded, and we do run plate-loaded machines at our facility, but selectorized is generally easier.

The fourth point I like to look at – and this is gonna seem kind of like a no-brainer, but I do see gym owners make this mistake – **[is] don't buy home quality equipment**.

If you're gonna be running multiple people in a day, make sure it's always commercial quality.

I've seen a couple pieces that kind of flirt the line between the two, and they're okay. If you're not running commercial bearings, if you're not running commercial-grade steel, the wall isn't thick enough, you're gonna run into maintenance issues eventually, and it just… it isn't stable.

You put somebody on a home multi-bench compared to a commercial multi bench, it's rickety, it just doesn't feel right. *It will do the job*. You *can* get a good workout. I see guys, they make homemade equipment outta wood and it will still work. But if you're trying to give a high-quality feel – and a lot of people in our industry, and specifically the personal training, what a lot of… I think your viewership-slash-listenership does, Lawrence – if you're not putting quality commercial machines that feel stable, that the end user's thinking, "Wow, I can't really do this in my basement or my garage." It's a no-brainer.

But I do see people trying to save money on that. I'm not a fan of that particular way of going. I always like commercial-grade exercise equipment.

The next couple points… it's a little bit more nuanced, but I do think it's important to bring up: and so, **number five… what is your target audience?**

So, even within the high-intensity umbrella, we have many different facets. So, just off the top of my head, we have people that do SuperSlow. That is what they do for every set, every rep. I used to have a powerlifting team with my gym.

It takes a lot of time to, to really do that, but it's a different style of equipment and different style of training for that. And then you look at somebody like Dick Connors who ran The Pit Gym for years, maybe the most famous high-intensity-slash-powerlifting coach that's been in our space.

And then you look at some of the purest – I'll call 'em the *vintage guys* – and if it's not Nautilus or it's not MedX, it just doesn't work.

Now, we've discussed on this podcast before and other people have discussed it too, that people don't need to know who Arthur Jones and Mike Mentzer and all that is, but if that is still what you're trying to put out there, that is what you feel is authentic to you, then you're gonna wanna have a gym that represents that.

So, if you are running a SuperSlow gym, you believe in that particular rep and set protocol, running old Nautilus machines will feel terrible.

Because the very aggressive cams do not work particularly well when you're doing those very slow repetitions. You're gonna want something with a far more passive cam. MedX kind of fits that bill too but if you've ever done a SuperSlow pullover on a SuperSlow pullover machine, it has a completely different feel.

Now again, let's just say that my facility is gonna be geared more towards a young lifter. I'm gonna have memberships. Maybe I do personal training, maybe I do memberships, maybe I do group training as well… it would probably be better for you to run two or three power racks with multiple barbells. And it's probably gonna be a lot better to have a rack of dumbbells, so you could have two or three people lifting different weights.

So, when you decide what your facility's gonna be what you want it to look like… And again, there's no right or wrong answer here. I know there's not a lot of CrossFitters that listen to you here, Lawrence, but if there was, putting in a line of MedX machines doesn't make a whole lot of sense because they're participating in a sport and their sports centers around being good at a lot of barbell lifts.

So, making sure that the equipment is for your target audience is gonna be very important.

The next thing I wanna look at is for **point number six** is what is essential, and we're gonna look at this **is what [are] your *wants* versus what [are] your *needs***.

So, let's take a look at a typical… we'll call it a MedX personal training studio. I think a lot of the people listening to you, that's what they're looking for. That's what they're striving towards.

So, let's just take – I know we've discussed it many times, but – the Doug McGuff Big Five.

I remember when Blair Wilson got started in Toronto, he had a very small facility. Square footage in Toronto is extremely expensive. And he had a big five and I believe it was a MedX core low back. So, six different machines. He ran a very successful business and he built it up from there. And with those six, you can say, “Hey, I can do a full body workout.” And then the low back is obviously a little bit specialty, but it has a lot of purpose and a lot of function — you can do great with that.

Same idea we talked about with some of the multi pieces. You get a cable piece, you can do so much with one of those free motion machines or a cable crossover. For me, those are *needs*. You have to have the ability to do a very good full body workout. Some sort of lower body compound motion, whether it's a squatter, a leg press — that's a *need*.

If you don't have something like that, why are they coming in the door to train with you? They can just go do body weight stuff in their house or down at the park or with anybody.

Now, once you get bigger or you have more cash flow, or maybe you get more space, or maybe you have it off the rip – which would be great – *then* I start looking at *wants*.

For instance, I just told you that I upgraded my hip and back at the gym. I think a hip and back is one of the best pieces that a facility can have. It works the glutes through a full range of motion. If somebody has any sort of knee issue, they can't do a leg extension, leg curl, leg press, it allows them to work their biggest, strongest muscle, which is the glutes.

I think I've discussed on here previous that I'm a big fan of the multi-hip. I think our… just 10 years ago, I thought our sector was sleeping on neck machines. Now I think just about everyone has one. I think the most slept-on machine in our space is a multi-hip machine… but these are things that *aren't necessary*.

And, same idea: I have a rotator cuff machine. It gets a ton of use because we have a lot of people with shoulder issues, and this allows us to treat them.

I have a machine called the Plantaris that was made by Dynavec – this is for rehabbing ankles. You don't *need* one of these machines, but once you get to the point where you have cash flow, it then gives you something that differentiates. You have people come in and they say, *I have whatever issue*, and if you have something for them that you can sell, that's great. But again, I think that is something that you're looking at down the road.

I have people that message me… even just earlier today, and someone was saying, "What do you think is better for targeting the back? A Nautilus machine or a Pendulum machine?" And I won't get into all of why that's not even a real good question. But… what can you afford and what can you fit? Because they're both gonna work. They're both gonna be great.

And having a pullover or pull-down. *[Audio drops out]* …to have, but do you need to have three or four rows? Do you need one that's independent and one that has a fixed movement arm, one that loads from the bottom, one that loads from the top? No, you don't need all that. It's nice once you get there and it gives you options.

But again, these become needs. So, I like for people to start with, or… sorry, that's *becomes wants*.

I like for people to *start with needs* — what is the gonna be the most basic setup that I can have that's gonna allow me to give great, generally full-body workouts with my client base?

Now, **the seventh point** that I have – and this is probably the most nuanced, and this is gonna kind of show how good your knowledge is when you're training and working with people. And this isn't something that you need to necessarily teach your clients, but if you have this information, it's gonna put you ahead of all of your competition, and this **is – I want you to understand the biomechanics of these machines, why you're buying them, why a certain piece is gonna be better than something else.**

And I'll just give you a quick… for instance, it's my opinion that almost every single machine row has been built improperly. And what I mean by that is almost every row pulls from… we'll call it 12 to 6, if you had a clock in front of you.

So, most people, when they're rowing, they say, "I'm trying to feel my lats." To really work your lats, you wanna do something overhead. So, most rows aren't great for building the lats. Most people are trying to work the middle trapezius, whether they know it or not, when they do a row. Now the middle trapezius actually pulls to the middle towards the spine. So, when you look at what is the actual muscle that is opposing the weight, if you're pulling, say from 12 to 6, it's the rear delts. So that is going to be what generally fails first.

Now, I've seen a couple of people try to alter this by actually making it wrong, making it more wrong, and it starts narrow and then it pulls to a wide position. This is opposite of how the middle trapezius works.

Now, when you think about how smart Arthur Jones was, he was making gripless rows, the rowing torso machines, and it comes wide and then it moves in, as it should. And he was using rotary resistance. Which is even better, 'cause when you look at the trapezius muscles, they don't attach to the upper arms. So, you don't need to hold onto anything to work those muscles. So, that's how far ahead Arthur was.

So we actually took a Hammer Strength machine and we extended it out on the front. So now it starts about three feet wide and it pulls into less than two feet as it narrows. This is how the muscles work. Now, I don't need to explain this to anybody who's in my gym, but when they get on that machine, they inevitably say, "Wow, I really feel my back when I do this."

Now, you can go through every single body part and make this happen. If you go and buy a MedX lateral raise machine and you have that direct resistance on your forms – and it doesn't have to be a MedX, it could be a Nautilus, it could be a body master – for most people, it's gonna feel so much better than doing a dumbbell lateral raise where you have to hold onto it or you have to work through the forearm as opposed to having the direct resistance on the shoulder and the resistance curve is just not correct. When you are at the very top, when you're in the weakest position, you are getting the most resistance because the dumbbells being pulled straight down by gravity.

Now, the interesting thing is if they can do it well, and they can do it progressively, they'll still get roughly the same results, but it won't feel the same. So, understanding that, “Hey, having a lateral raise machine on my line and why the average person is gonna feel it better than using a dumbbell” is important.

Even when you set up a cable for a lateral raise — if you set it up at hip level as opposed to ground level, the resistance curve will be better and people will feel it. They don't need to understand why. You don't need to get into all the biomechanics. But when you understand these things, you can offer a much better *feel* and a much better *experience*.

And then also when you understand the biomechanic, you can look at an exercise machine yourself and say, “Hey, this brand, this company, they really hit this one outta the park and here's why.” And when I buy that particular machine and I put an absolute layman on it without any knowledge, they're gonna say, “This feels really good.”

So again, it's very nuanced, and you get real deep in the rabbit hole with this. But understanding the biomechanics and why a machine is gonna feel better for your client base, I think is interesting. And I think it separates you from the next trainer down the road.

Lawrence Neal: Mike, that was awesome. That was so good. That last point, I feel like could be an entire week's worth of masterclasses and podcasts by itself.

Mike Petrella: You can almost go through every muscle group and explain why one machine would feel better than the next.

Lawrence Neal: Yeah. And I'm definitely gonna be following up with you to do a podcast on that if you're open to it, 'cause I think that it's a fascinating topic and super useful and… picking equipment that is really congruent with the biomechanics and developing a good understanding of that… I should reach out to Simon Shawcross, see if he wants to do a course or something! They… HITuni — I think it'd be perfect.

Mike Petrella: I'd be open to doing something like that. Simon's a great guy. I love doing your podcast. So, anything you guys need, I'm happy to help with both.

Lawrence Neal: Awesome. Okay. Yeah. And Mike, that was brilliant. Pete, did you enjoy that?

Pete Cerqua: So, you guys know I have a fair amount of experience in this industry, yet I wrote down everything he said, even though this is a recorded call.

And let me tell you why I did that: because you learn better when you take notes, even during a recorded [call]. So, when I go back and watch this recording later, I will even add to my notes and that will get me to the next level.

Plus everything that Mike says is always, like, spot on. There's nothing to add to this.

What I can contribute is – I mean, absolutely nothing to what Mike did; the seven points just knocked it out of the park – take everything he said verbatim. If you follow 50% of what he said, you can make a hundred thousand a year. You follow everything he said, you'll make 200,000 a year if money means anything to you. So, there's that.

I would love to talk to him about a few notes that I made that I think you guys will benefit from.

So, the first note is – when you were talking about cost and talking about new and used, Mike – do you have any stories of maybe getting a really good deal on a used piece of equipment?

And of course it doesn't show up maybe as represented, maybe it's a little beat up and it needs to be reconditioned, or it really needs to be tuned up by you? And I think why that's… hearing a story like that from you is… because some people may see a good deal on a piece of equipment that could, that can get their studio off the ground but then get afraid of dealing with getting it up to speed.

Mike Petrella: Yes, that has happened to me. I think that's happened to everybody a few times.

I will say that out of the majority of deals that I've done, people have represented things I would say fairly accurately. And it's actually probably the minority, the vast minority of times that I've got something that, “Wow, this is really not what the picture suggested.”

Sometimes it's in the picture and you just don't even notice that it was there. It's “Oh, there's a rip in a pad,” for instance. And it's say, “Yeah he definitely sent me a picture and there's a rip in the pad.” So, he didn't necessarily misrepresent it. I was just so happy to get whatever I happened to be looking for at that time.

I find that most of the used equipment – at least if you buy quality stuff, like we talked about, the Nautilus, the MedX stuff – is almost always mechanically sound. There's very few times where I have to really change anything outside of maybe a chain or a belt. I don't think I've really gotten too much where it looked like something was dropped off a truck and there was something severely bent, like something that would require a welder to fix up.

I would say that, on average, just keep a few hundred bucks on every machine that you buy ready to go – just in case. But a lot of times you take pads, you take 'em off, you can even just use soap and water. It's amazing how good they come out. Maybe there's a bunch of dust that's been on, 'cause they've been in someone's storage locker for 10 years.

When it comes to the chains, a lot of times you can take 'em off, you can soak 'em. I use 80-90 gear oil. You can soak 'em, and a day later, you dry 'em. They come back and they're ready to go for another 20 years.

Kevlar belts, I've never actually seen one snap. I've only seen them fray and they're, again, a little bit more costly. But still, you can get a brand new Kevlar belt for just about anything for a hundred or less. So, as long as you are somewhat mechanically inclined and you can do your own maintenance, I find that it's not a big consideration. Unless someone absolutely tried to screw you over and they sent you one piece instead of another, which doesn't typically happen. Again, most people are pretty good.

And now with social media, I think it's better, because someone can contact myself or someone like you, Pete or Lawrence, you guys got pretty good networks and say, “Hey, have you ever done business with so-and-so?” and you're gonna find out pretty quickly who the person is.

And again, nine times outta 10, it’s like, “Yeah, they're a really good person. I've done business with them before.” So, you know, you can do a little bit of investigation, but for the most part, you keep a couple hundred bucks ready to go for maintenance on a machine, you're probably gonna be okay.

Pete Cerqua: That's great, Mike. Thanks.

Let's talk about the Smith Machine option that you put out there, which I love. So, first and foremost, all Smith Machines are not created equal, and I don't think people know enough about that. You can really come up with crap for a great price, brand new. Can you tell us a little bit more about good versus the bad? And then I've got a follow-up question to the Smith Machine.

Mike Petrella: You're absolutely right. So, I did not have a Smith machine personally for over a decade, and a lot of that was because the two main gyms that I had access to before I ever had my own, both had Smith Machines and one of them was just junk. I don't even remember what brand it was, but it was terrible, it had a horrible feel. And the other one was actually a good brand. I'm not gonna use the brand's name because it's still out there and it's still considered a good brand. Maybe it needed some… maintenance…? I'm not sure, but it always felt horrible. There was just a lot of friction in it. And that's the main problem with the Smith Machine.Obviously with the barbell, you just through air… so, you're absolutely right about that.

Some people like it to be straight up and down. Some people like it to be on a bit of an angle, so you always gotta have a personal preference for that.

But I have a couple of people that I go to just the same. A lot of people ask me about equipment, but I ask other people as well and a couple people who I really respect. I said, “If you could buy any Smith Machine, what would it be?” And they told me without hesitation, “The original Cybex,” the OG Cybex Smith Machine. And again, if you're in the industry world you'll pretty much know that it is the one to get. And I never used it before, but I trusted their advice and I put it on my floor and it is so smooth. It's run on very high-quality linear bearings, big stainless-steel shafting, and it's just a great feel.

And even things like… a lot of Smith machines, they don't go to the ground. And the reason you want a Smith Machine to go to the ground, 'cause if you wanna do something like like an RDL, you want to get that stretch in the hamstrings. And there's some very good Smith Machines out there that you cannot do an RDL unless you stand up on a bench, or something like that, and again, that can be done, but if I have a client, I'd rather them stand flat-footed on the ground than me put a bench across for them to stand on, which is gonna be a little bit less stable.

So yes it, it is a big quality thing. Again, you can ask around and people will probably be happy to tell you: the Flex is really nice; the BodyMaster is really nice; the Cybex, which I mentioned is my favorite so far — It's really good, but what I really like about it – I think there is several barbell movements that have a tremendous amount of value – but there is a good section of the population that cannot do barbell movements.

They're just… they just don't have the nervous system for it. And if you give them barbells, they're potentially going to hurt themselves. Hopefully not, but they're not gonna get the results that they want because they just can't push into those later reps and keep their form. And we know that working through those hard reps is where all the magic happens.

So, if they're stopping 5 reps short of failure because they just can't hold posture correctly. The exercises of less value. So, if I can just put them on something like a Smith Machine where, an incline chest press on a barbell on a Smith Machine is very similar, but it's much easier to push average population on that Smith machine than it is on that barbell.

So, I think it has tremendous value for people. // TK continue from here

Pete Cerqua: You said everything I was looking for. Thank you for that. A follow-up for that is if we go with your model of maybe setting up some barbells, dumbbells –and you mentioned rack versus the all-in-one kind of a thing; very smart, but… and some Smith Machines — would you recommend two Smith machines and have one situated for lower body with no bench nearby and one situated for a bench and upper body kind of things? If the space warrants it?

Mike Petrella: I think that would depend on what kind of business I'm trying to make.

So, if it was just a pure one-on-one, just you working with a person, I probably wouldn't run two Smith Machines because there's still a… whether it's a Smith Machine or a rack, it's a good size footprint because you have to have the width or the length of the bar. You have to be able to get people in and out of it and you have to be able to load on both sides. So, you know, a bar is seven feet, loading on both sides. You're looking at 10 feet, regardless. So, if you're running two Smith machines, it's a lot of footprint, especially if you're looking at a smaller facility.

Now, if you're looking to have multiple trainers, having two of them on the floor could be a very good idea. Because again, you have someone doing lower body, someone doing upper body, or even they might be doing upper body at the same time, and you don't wanna be waiting for the machine. So, it is big. But if you're doing three or four exercises out of their routine on it, you can spend a lot of time in that particular real estate.

So, I think it would depend mostly on, am I looking to — I don't know if having multiple trainers is considered *scaling up* – but am I looking to have multiple people in my facility working out at the same time and have trust in other trainers, or am I looking to keep this as a pure one-on-one, just me with whoever I'm working with model?

Pete Cerqua: Nice. One more question for me, Lawrence, and this is gonna be about Nautilus equipment.

There's a lot of new people that, that follow High-Intensity Business and Lawrence, and all of our podcasts, and they go right to Arthur Jones and they wanna just really follow in his footsteps and start their studio that way.

Is all Nautilus equipment created equal? And you mentioned about staying away from home gym equipment. Doesn't Nautilus have some home gym kind of pieces? And could the new studio owner be misled a little bit when they just see the Nautilus name and not know about home versus commercial?

Mike Petrella: So, Nautilus, as you guys both know, and I would imagine the viewership knows a bit, but they've had multiple generations and iterations of equipment.

So, when you get into the earliest stuff that Arthur made, there is still no better built equipment out there. It would simply be too expensive to build a machine to the same quality that an original Nautilus machine is. The steel would be too expensive, the labor would be too expensive. It's just… you can't build it.

I've probably said this on your podcast before Lawrence, but if you drop a Nautilus stack from the top compared to any other weight stack, it will make a different noise. And that's because the quality of steel, even in the weight stacks, is essentially not something you can replicate without making the equipment today just an unbelievable high price.

So, when you get into almost anything that was chain-driven, it's gonna be very high-quality stuff. With every generation that you move further away, you'll see the cuts. Now, I sometimes think about, “How far can you cut and it's still going to be good?”

A Hammer Strength machine is not built as well as a Nautilus machine. It simply isn't. But a Hammer Strength machine is still almost indestructible in design.

So, when I get into the latest Nautilus, I see little things that are breakable that are gonna have warranty issues, potentially. If you're probably training people one-on-one, I think you can mitigate a lot of that 'cause you're in control of what's being touched on the machine. Most likely people aren't dropping things.

When it comes to Nautilus home equipment, they did make some home stuff under Arthur, but it's so few and far between, I wouldn't even be too worried about it. I was thinking more about if you were to go to – up here, we have something called the Fitness Depot; I don't know what the American or Irish equivalent would be of that – and you can go and for maybe $5,000 or less, you could buy a nice little setup for yourself. And if you're just using it yourself in your basement working out, you're gonna do fine. But if you were to put that equipment in a commercial facility, they would chew it up very quick. And even in the model that most of the people that I assume we're talking to run, whereas I can do like once-a-year maintenance on most of my machines, and even then, it seems like that's too much. Like, you get to something that's there's no additional wear that's taken place. You're looking at this stuff saying, “I don't know if it's gonna make it another year.” Because, they have bad bearings, the actual quality of the steel, like it's a little bit thin. And if you get some really big guys with some really strong weights, they, you start thinking, “I don't know if I really wanna put them on that bench.”

So, I don't know how far you have to worry about… *as long as it's commercial*, but certainly the earlier stuff is built at a quality level that I, like I said, I don't think could be replicated without a gigantic price point.

Pete Cerqua: Awesome. Anybody watching this? If you replay this once or twice or three times, you're good for $250,000 a year. So, I advise you to do it. Thanks Mike.

Lawrence Neal: You might need a few extra skills as well though, right?

Pete Cerqua: No. Not for the first quarter of a million.

Lawrence Neal: Absolutely for just… in terms of like equipment set up and selection. Yeah. Mike, that was awesome. Great questions, Pete, I always love your humility in these types of situations.

So, gonna open up for questions. So, Jeremy's very busy in the Q&A with some great questions, so I'm just gonna ask these directly, Mike.

Mike Petrella: Sure.

Lawrence Neal: So, question one, how important is it to have a super-balanced resistance curve, really?

Mike Petrella: If you are looking to give somebody a different quality of workout, in terms of feel, it is very important.

If you've ever gotten a machine that has the wrong resistance curve, it just feels bad right from the get-go, and the only way that you can counteract that is by underloading. You need to go into the higher repetitions. So, the first few repetitions, that doesn't matter… it matters more. The closer you get to failure, the more a proper resistance curve matters and the better that it feels.

So, if you're really trying to give a high-end experience, I do think it matters quite a bit.

Now, in terms of results, I'm not so certain about that. I do believe that as long as you're working pretty hard, getting close to or at failure, I do think the results are gonna be the same.

I don't believe – like I was talking about – altering the resistance curve on a cable lateral raise, which I think is great. I think it feels better. I think more people enjoy it. I'm not convinced that if you had the best lateral raise machine – you did what I talked about on a cable lateral raise, or you do dumbbell lateral raises – if they're all done to failure or close to and progressively, my guess is your results are gonna be fairly similar, maybe even the same.

But in terms of giving [someone] a feel and a workout that they're really going to enjoy and know that it's different even on an intrinsic level than everybody else. I think it's important.

Lawrence Neal: Just to add onto that, just to clarify then, Mike — so, not only is it gonna produce a better feel, which I completely agree with, if the biomechanics are congruent with the person on the machine, it's also going to probably help them reach fatigue sooner for the target muscle group, even though I totally agree with you all roads lead to Rome probably and are gonna get,

produce similar results with something that's less congruent but you think actually it's more efficient? Which is something I haven't really thought too much about, to be fair.

Mike Petrella: There are certain people that if you gave them a bag of rocks that they could put additional rocks into to be progressive, are gonna get great results.

I think I read that Vince Gironda, the most impressive athletic trainee he ever had was Carl Weathers, who played Apollo Creed, and he played some professional football before he got into acting and the Rocky movies — if you gave him that bag of rocks, I'm sure he would still look like Carl Weathers slash Apollo Creed. I don't think it would make any difference.

Now, when you're dealing with the average population, they're not gonna get where they want to go. If they could, I think the results would be the same. But I don't think the average person get there.

So, if you can put somebody on a machine where they don't need to think about a lot, they just have to push or pull and work hard, and a lot of things are happening that they're unaware of, they will probably get better results.

But even if I'm wrong and the results are essentially the same, the feel and the workout is gonna be of higher quality to them — they're going to at least perceive it that way. I think it probably is better, but if they perceive it that way, that's still fantastic for your business.

Lawrence Neal: Awesome. Thank you, Mike.

And yeah, so just so everyone's aware, obviously question time now for the next 16 minutes. So… probably the best thing to do actually, is put your questions in the Q&A pad and I'll ask those on your behalf.

So, next question is [from] Michael McMillan, who, obviously, we all met together there at the Strength Forum recently a year ago.

He [asks]: "In the lumber extension machine," which I'm assuming he's talking, referring to the MedX, but could be others, "…what prevents the pelvis from pivoting brackets flexing forward when the client is lowering the weight?"

Mike Petrella: What prevents it…?

Pete Cerqua: The seatbelt, right…?

Lawrence Neal: The seatbelt…? Sorry, go ahead, Mike.

Mike Petrella: On the MedX, they have the *Core* version and they have the *Medical* version. And basically, the only difference is how elaborate the restraint mechanism is.

So, you have a knee restraint and then you have a belt restraint. And the idea is you want to put somebody in tight enough, there's a roller pad against the lower back that you don't want to rotate. Sometimes you can't put people in that tight, they just won't tolerate it, but assuming they can, you put people in relatively tight, and to my knowledge, that's the best possible way that they've come up with to try to isolate those lower back muscles.

Now, my guess is he's probably come up with something that says that maybe there's a different way of doing it or maybe that it's not overly important.

I actually personally think there's a few different ways to train the lower back. I think the MedX lower back's probably the best way of doing it that I've used. But there's certainly more than one way to skin a cat. So, I think the simple answer is *the restraint mechanism that's provided does it*, but my guess is he's got something else that he'd like to add to that.

Lawrence Neal: Yeah, Mike, if you've got a follow up question, let us know and just put it in the Q&A pad.

Yeah, just to add to what you're saying, Mike I was over at Optima Strength, which is the location I helped co-found here in Galway yesterday. And they've relocated to the other side of town, so it's quite difficult for me to get there with the traffic.

But I was able to get over there and work out on some of Eggert Barwich's MedX equipment – He's based in Germany. Attendees will recognize the name from… in sponsoring the brand over on the in the community there – and he produces, builds MedX in India, and is a big supplier to Kieser Training in Australia, and a big supplier to some of our colleagues, Mike, you might already be aware… And I used his MedX Lumbar Extension for the first time yesterday, and it's unbelievable! It's so much better than the Core version, and it's so much more polished and fancy, and the restraints are so much more comfortable.

And yeah, like, to your point, it has to be tight in order to stop that pelvis from moving forward.

Oh, so. Mike's got a follow up here — so, he says, "The seatbelt I've seen… goes on top of the thighs, not on the pelvis." Right, okay — so, he's critiquing the seatbelt position.

Mike Petrella: Yeah… as far as I understand it, he'd want some sort of pad-slash-restraint to come downward on a 45-degree angle.

I come from a front to come down on your angle to stop you, so you don't have that particular motion. When it comes to this exercise equipment stuff, you can go pretty far down the rabbit hole of how crazy you want to make something.

You look at the X-Force machines, which I really enjoyed using when and I did a workout under Roger. They had tilting weight stacks to make the negative 40% harder. Now I'm a big fan of negative-only training. I think it's something that every trainer needs in their toolbox, we'll say. How superior is it to just training progressively over time? I don't know.

If you were to come up with some sort of additional restraint to a MedX Medical Lumbar that stopped 10% more rotation, how much better would the results be? I don't know. I would say that a lot of these things aren't really where we need to be spending our time.

Again, I think if you give someone an adjustable bench and a set of dumbbells that has relatively good control, they're probably gonna get 90% of the results that they want or that they could achieve.

It's an interesting idea, but do you want to buy a $50,000 machine and then spend $10,000 modifying it to get you a net benefit of 2%?

Some people do. In fact, I know I won't use his name, but I know a guy, he felt the frames on MedX machines weren't strong enough that they flexed under load. And he took all the MedX frames and he cross-braced them three or four times because he didn't like the way they felt.

Lawrence Neal: Can you share his name or do you wanna keep him anonymous?

Mike Petrella: No, I'm gonna keep him anonymous. He's a pretty private guy. He [posted] everything online back in the day, but I don't think he has much of a social media presence. I could, I'll see if I can find the old picture.

But again… yeah, I'm sure that frame doesn't flex a millimeter anymore — does it do anything different? Probably not, but that's where he wanted to go.

And could you re-engineer something to make it just slightly better? Sure. I re-engineered a row machine I talked about earlier and I think it is a big upgrade in terms of feel. I don't think it's gonna massively change the development of my back compared to any other row.

But, like I said, it's what you're interested in; I don't think it's gonna make business better. I don't think it's gonna make results that much better. If you got on it and it was way more comfortable, I could see that being good in both – just like you talked about the restraint mechanism on a Medical versus Core – it's certainly more comfortable and works better. But you're talking a price point of… the one was about $50,000 in the nineties.

Lawrence Neal: Oh, and this wasn't a *Medical*, this is like Eggert's upgraded Core version, I think. And it's not got all the fancy… yeah, it's probably somewhere in between, actually.

Mike Petrella: Okay, 'cause I know Kieser has a machine that is much closer to the *Medical* than it is to the *Core*, so, that's what I was thinking.

Lawrence Neal: That might be what this one is actually.

Mike Petrella: Okay. I'm sure the price point on that's in the tens of thousands of dollars, whereas I'm not sure what the *Core* is right now… *Core* is probably $10,000 now, but for the longest time, it was like a $6,000 to $8,000 machine 10 years ago as opposed to a $50,000 machine 30 years ago.

Lawrence Neal: Yeah. Wow.

Mike Petrella: I'll add just one little thing to this — so I had the *Core* Low Back first, like a lot of people did, and eventually I upgraded. And we actually did the medical testing on the people that had been doing the *Core* Low Back for two or three years previous to see if it translated.

Because the idea was, if you don't restrain everything down, you will not get the results through a full range of motion. The people who could tolerate the tightness in the *Core* version did see full range benefit. A lot of people could not tolerate how tight you'd have to put 'em in, and in the, say the last little bit of extension their hips would come up, and when we tested them in the *Medical*, they *did* have a drop off in strength.

But as long as they could tolerate the restraints on the *Core*, they had, in my opinion, the same benefit as the *Medical*. The *Medical* just made it easier to do the job.

Lawrence Neal: Just 'cause it's more comfortable for the most part. Is that the reason?

Mike Petrella: It's easier to restrain somebody down and not have any sort of discomfort in the knee and the hip.

Lawrence Neal: Yeah. Fascinating insight. That's really interesting. So, moving on… now this might be a difficult one for you to answer, Mike, so you could answer it differently if you prefer.

What are the worst machine companies?

Good to know what to avoid from the outset. So, you don't… you *can* name companies if you want to. It's up to you how you wanna answer this — If you don't want to, we can move on.

Mike Petrella: No, no. So, basically, most of the worst companies are companies that don't really have names right now.

… For instance, you can get almost a knockoff of anything you want coming outta China. They just don't build it at the same quality. And it starts right from the bolts. The bolts are softer. The actual metal itself is lower-grade metal. A lot of times it's thinner wall, which you don't want. Even the grips break down. I don't know what kind of crap quality rubber they're putting out, but I got grips on a Flex Chest Press from the nineties that still look brand new, and you'll get something that's from China that's a year old and they're falling apart.

But most of these companies, they don't even have names. You can go on Temu or Wish or Alibaba or whatever and you can buy this stuff.

And I know… I've seen gyms that they have millions of dollars into the build out. I've seen a gym that has a Lamborghini in their foyer as decoration. They bought 40 leg presses that are all out of China and they're all junk. They look good, they're all painted brand new, and it'd be a small fortune to try to do the same thing built from either American or there are Chinese companies that they have like names behind them – like, you have imagine Strength [who] sponsors you, I know they're doing stuff; a company like Max Pump, I've heard some really good stuff about them, they're trying to recreate the double machines – so it *can* be done, but you gotta do your due diligence.

But just like the Nautilus machines, the problem is: to make a machine at the highest quality possible today, the cost is there. So, if you're buying a brand new leg press for $2,000, look, it just cannot possibly be the quality that you want.

Steel costs money, labor costs money. And if it doesn't have at least a suitable price point to it, it's just not going to be what you think that it's gonna be. It might last for a bit, might even feel pretty good for the first year or so, but, you look at stuff that Arthur made in the early seventies and guys are still using it today with a little bit of grease and a bearing, and it runs perfect.

If you're not buying a credible name, something that has a bit of a track record, it just isn't gonna work over the long haul.

There's been certain brands that, I think they had a lot of misses in terms of their biomechanics, but they still hit ones out of the park. Like, for instance, Arthur, he really didn't like Cybex machines. They were one of his main competitors. And they had their isotonic machines, if I'm having that right…? They were positive only, no negative…? And they were used in rehab facilities forever. I've used one, I think they're terrible. But the Cybex Smith machine is, in my opinion, the best Smith Machine ever made.

And they made a line called the Advanced Line that gave you, for instance, you had a chest press and it had an X and Y axis. So, it was almost like giving you a dumbbell press on a machine and it feels great, and they just made fantastic stuff.

So, there might be some [hits] or misses, but as long as you're buying a quality made commercial machine, you're probably gonna be good. You can really save money by going offshore with this stuff, and it's like everything else — you're probably gonna get what you pay for.

Lawrence Neal: Yeah. So, just watch those price points. I'm gonna paste this question in the chat, Mike, so you can read it as I read it, and this will probably be our final question.

Mike Petrella: Okay.

Lawrence Neal: Maybe if someone's got another question, just make it really short and put it in the Q&A [pad].

So, regarding patterning correct neuromuscular coordination of prime movers and stabilizers – et cetera – per given movement, do we know if using only machines have downsized, like many people argue, if someone does a leg press for the rest of their life, are they missing something compared to the squat regarding short and long-term injury prevention?

It's a good question.

Mike Petrella: Okay. So, I would answer this by saying what are people's goals?

So, when we're looking at injury prevention, what if… I were to get you to play hockey, Lawrence? I don't know if you've ever played the game.

Lawrence Neal: Never.

Mike Petrella: Okay. Never.

Lawrence Neal: I'd love to!

Mike Petrella: So, what I can tell you… come to Canada, I'll show you how to play it!

What I can tell you is regardless of what you do in the gym, regardless of what machines or free weights you use, regardless of what other sports you may play, your ankles are going to kill you the first time — there's nothing you can do to condition to hockey without playing hockey.

Now there's things that you can probably do to help out a little bit, but I could put you on the Plantaris, which I think is the best ankle machine ever made – probably the only ankle machine ever made – and it might help a little bit, but you're not gonna wanna walk for the next 48 hours after playing hockey.

So, when we get into injury prevention, making all of the muscles as strong as possible in the safest possible way of doing it – which I think for most people is machines that target prime muscles – and then you have to go and you have to practice whatever you're trying to do, and you're… gonna become better at that. And becoming better at that, you're gonna become proficient in both making sure that your output is better and you're not doing stupid things.

When you look at somebody who has never skated before and how bad their skating is, how bad their gait is – and I know you play a lot of basketball; you get someone on the basketball court and they never played basketball, their footwork is terrible — you're looking at that thinking, "you're gonna roll your ankle anytime now," and it happens to professionals too, but – you're just, you're watching somebody who's just a walking time bomb in terms of trying to get an injury.

So, I believe that if I used machines, free weights, body weight, or any other form of resistance, and then had never done whatever I'm trying to do, I think the injury prevention is, maybe a little bit better – I think being stronger is better than being weaker, but – you really need to practice what you're doing. Even if you're in good condition, you're in generally good condition, if you try something absolutely brand new, the chance of injury is gonna be much higher.

So, it's a very hard thing to define, to say, "Hey, is there something that I can do that is going to prevent injury across everything?"

And if I did have to generalize it that way, I would say being as strong as possible in every single muscle group is probably the best thing you can do.

And when we look at the data on machines versus free weights, generally, the machines win by a very small percentage for no other reason that a lot of those lifts are more stable.

So, I would say that if I could make… if I'm looking at a squat, if I could make that squat more stable, maybe by holding onto something on a rack and using like a bar that is, like a safety squat bar, so it's sitting there so I don't have to put my hands up behind me and wobble – this way I can put my hands in front of me and I can stabilize my spine – it's probably a better way of doing things because I can work more muscle, I can be more stable, I can be more intense and more deliberate. But trying to lift free weights over a machine to gain some sort of general conditioning, over 1,000,001 different tasks… I think you're just wasting your time over just trying to become stronger at basic movements.

Lawrence Neal: Yeah, very articulate, Mike. Really well said. Thank you so much for today. Thank you for everyone in attendance. Thank you, Mike. Your time is really appreciated. Thank you, Pete. Great questions. This has been really productive.

Just so everyone's aware, this is recorded, so if you wanna watch it back, it'll be in, probably in the classroom in High Intensity Business Pro.

And just wanna also say, check the calendar guys — we've got other calls coming up, Masterminds, Q&A with Pete, and there'll be a Masterclass next month with Dr. James Fisher.

And we haven't really completely decided on the theme and topic yet, but there'll be obviously some kind of update on strength training science. Very exciting. And then there'll be Q&A as well.

So, there you have it, Mike. Thanks again. Really appreciate your time. Hope you have a great rest of your day and we'll talk soon.

Mike Petrella: Looking forward to that and thanks for having me on. Good seeing you, Lawrence. Good seeing you, Pete.

Lawrence Neal: Thanks everyone. Have a great day. Take care. Bye.