Masterclass and Live Q&A with Robert Francis – High-Intensity Training and Rehabilitation (AUGUST 2024)

Lawrence: Welcome everyone to the August 2024 High Intensity Business Masterclass. We do these every month and we alternate between personal training topics and business.

Today we have – I hope this is accurate – 40-year High-Intensity Training Veteran and Inform Fitness Trainer, Robert Francis. Robert is going to present on HIT rehab protocols and similar topics, and we're going to do a Q&A straight after the initial presentation. And we're just going to go with the flow and see how long that presentation may go.

And we'll try and get into Q&A as quick as we can. So, Robert, thank you so much for making the time to do this today, and over to you, and excited to learn from you.

Robert Francis: Thank you, Lawrence. Yeah, Lawrence had wanted me to speak to, matters regarding rehabilitation. And the ways that I've treated rehab with high-intensity training and using high-intensity training principles and, things that I've really learned from treating people with the MedX tool early on.

A couple of things right up front, intense and specific exercise is safe and efficacious. Long-term chronic patients also do well with the strengthening exercise, very effective treatment, even for long-term chronic patients. Strength and pain are very closely related. They are, there's almost a one-to-one correlation between strength and pain, and pain or the experience of pain.

High-intensity rehab is also cost-effective and fairly helpful to the entire rest of the body. And one of the, one of the things that I, that I think is most valuable in a rehab program is one element that we have in high-intensity training that does not exist or the concept does not exist in physical therapy and occupational therapy as taught by the American College of Physical Therapy.

One other thing: diagnosis is largely irrelevant once certain things are ruled out. Cancer is one; recent surgery; certain injuries — but for the most part, diagnosis is not really a factor once certain things are ruled out.

The advantages are what we do with the strengthening procedures are they're non-surgical, non-drug, relatively brief, and infrequent.

It's not an everyday matter like what they do and what's done in physical therapy. And greater strength is associated with feeling better overall.

One disadvantage here in the United States anyway, is that it is not covered by insurance. And I think that, for the most part, conditions that you're going to see the most are going to be low back pain, shoulder and knee pain.

You'll see osteoporosis, some athletic injuries. Cars are a bit safer, but you still see a time or two, you'll see whiplash injury and whiplash injuries are going to require a certain bit of a different tack. Something very simple that the high-intensity practitioner can do very easily and has, in most cases. have the equipment to deal with.

I think I'll talk about that, the specifics there. What strength training does, in the rehab milieu, is that additional strength increases cross sectional volume of muscle, of the musculature. You have improved neuro-mechanisms that you have more, you'll have more motor units, faster-firing motor units and motor units that are better able to obey the brain's command.

And those things start to break down with an injury and with some disuse or a limb in a cast or during a period that might be of convalescence. The increase in cross-sectional volume of the muscles also is associated with… you'll also have an increase in tendon strength and an increase in bone mass.

Those things respond very predictably in the way that we train people, and we train people to failure. We train people close to failure. We try to elicit that response. The high-intensity response is very effective, efficacious in injury rehab, and in various conditions, especially related to joints, the spine, the shoulder, the hip, the knee, the ankle.

And in my practice, I use, for the most part, I use the MedX model for rehab.

First, treating the weak link, where you may want to use a much larger mass of muscle to drive the weak link, because if you're training shoulder impingement or training a cervical injury, the overall effect of that kind of exercise might be relatively small and elicit a small response systemically.

So why we want to use a leg press and use a leg press correctly when we're training a smaller injury, it could be a wrist. It could be a hand. It could be an elbow. It could be a shoulder because of the indirect effect that you get from the larger, stronger masses of muscle that changes the body's reaction to the exercise and accelerates the effect of the smaller, more isolatory, exercises, where you'll want to stabilize the anatomy, find the pain-free range or ranges because it's many times I've had to place somebody in a MedX lumbar and use two separate ranges where the middle range might present more pain than is tolerable and increase the strength in two remote ranges until strength is built to the point where the entire arc is becomes tolerable and eventually pain-free.

So, once you find the pain-free range or ranges of motion, you'll want to apply the exercise procedure in that restricted range.

There are times you'll recheck and if the pain free ranges increase, it'll usually increase because there's carry over in the arc. The equipment that we use in high-intensity training is well-suited for stabilizing the anatomy and getting a very specific training arc to the structures that we're looking for.

Invoking the indirect effect is very important, and that doesn't exist in physical therapy. A leg press and especially a calf press, the calf muscles have an enormous metabolic effect. The *gastrocs* and especially the *soleus* behave very differently metabolically from most of the other muscles.

They burn fuel a little bit differently. And they have an up-regulatory effect, not only on all of the other organ systems, not only on the muscular system, but even on the vascular system and, and for the heart and that'll be an entirely different presentation, because there are vascular effects here with these, once you've, once you've addressed all of those things, no matter what the rehab consideration is.

In my opinion, you need, you'll need to address postural problems. The, this is something that is not necessarily new, but far and away, more ubiquitous now than it was 20 years ago with people looking at screens and the use of backpacks and children and the postural problems present it. Something that you, ought to be treating no matter what, even as a preventive measure, but postural problems cause mechanical loads to hang on soft tissues in ways that deform the tissue, the skeleton, and we've got equipment to address that.

Regardless of what the problem is, the head-up position is something that people no longer naturally do. People don't wear ties anymore. And it used to be at the turn of the century, people wore high collars and people wore ties and the upright carriage was almost prevalent everywhere.

We wear different clothing now and we have different habits, and the combination of looking at screens and having the head-down position, and, it's become normalized to a fault. And in my opinion, that's something that ought to be addressed in every rehab program is the eyes-up and head-up position.

I think that high-intensity training, that the way that we apply [it], has these strengthening effects far, better than what's usually provided, usually, a physical therapy will very often be, you'll have, the thinking is activities that are covered and activities that are covered are in general, not as specific as the exercises that we're used to applying.

I think that, for, the majority of people that come in front of you presenting a problem or a muscle joint problem, there's no question that strengthening has every advantage and really has no disadvantages. And in most cases, people that have been through.

Everything, including some people that have been through surgery and acupuncture and physical therapy and chiropractic and massage and all the other things, they almost always come in and they will get better. And even if there's not a complete reduction in pain, there's meaningful reduction in pain that they can go back to work.

They can go back to sports, and they can go back to, the activities that they missed. And sadly, they usually go back to the activities that cause the injury in the first place.

Lawrence Neal: All right, Robert, you still with me?

Robert Francis: I'm with you.

Lawrence Neal: Yeah. Do you, want more to share or do you want to start going into Q& A?

Robert Francis: Let's see. What's the first question?

Lawrence Neal: Yeah what we're going to do is we're actually going to unmute the guys so that they can actually ask you.

I find this to be much more productive because then they can talk, ask you a question. You can answer it, and you can have a bit of clarification. So, you can have a bit of back and forth to actually identify what the question is. So, I've got the guys on the call now. So, James, Steve, if you've got a question, please raise a hand and I'll give you the opportunity to, ask Rob a question.

Or if you prefer, I can just go to the post in the community and ask Rob a question on your behalf. So let me just find that post. Just bear with me a second. Oh, James, here we go.

You should be able to talk now, James.

James Brown: Great. Yeah. Thanks. Robert, scribbling lots of great notes… I'm not the only one sort of interested in knees, particularly I guess for context, I've got a range of clients with different ages and different knee histories, some of which, the ones I feel less confident with are the knees that actually make noises. Perhaps they've had replacements, perhaps not, but there's audible, creaking wood noise. If you can just talk, to that in any way, that'd be great.

Robert Francis: In general, what can happen is that you can get a condition where there are bone changes to the point where, the joints like when your knuckles crack, you have a vacuum that forms, where the bones meet and where the cartilages that are connective tissues and when, if that vacuum is, filled with synovial fluid, that's what makes the noise in general.

Now, unless it's tendons snapping over bones, which could be in general, usually, that'll, that could be a warning. And in that case, what you, may find less of that. If you ice the joint before you train it… are there arcs? This is what you go... You're going to look to discover.

Are there arcs that don't produce that that snapping sound? So, you may have to divide you've got about 130 degrees range of motion in the extension. You may choose to train the first part of the arc from, let's say one 30 to 72 degrees. And maybe you don't get any sound there.

You may train from you may train from maybe, after 72 degrees, you may choose to train just from 20 to zero degrees. So, you may have two that you want to train. In that case, if you're not getting any noise for the most part. It's synovial fluid rushing into the vacuum in the joint.

James Brown: Yeah, no, thank you. There's, I have one client where that's exactly what I've done. They're in an extended knee position in the leg press and in a very flexed knee position in the knee extension because the noise is all in the middle.

But, it's… I don't know what the different noises are. You've obviously explained the causes of the noises, but I've trained them like that for a while.

And the noise is still the same. They've never had any pain during or after. I how do I know whether I should be training through the noise or not?

Robert Francis: In his case, pain is the guide. Here are two other things that are going to be helpful with a compromised knee: regardless of what the ideology is of the problem, train calves first, train knee flexion, leg curl next, before you get into either knee extension or leg press, the knee needs to have some preparation.

Leg press is a lot of torque, the knee can handle it. It certainly can prepare the knee with knee flexion first.

And you may see that their poundages are not going to be what they were training them fresh, but it'll prepare the knee far better than using either knee extension or leg press first.

James Brown: Yeah. Thanks. I remember you saying that on the podcast with Lawrence and I took that to heart straight away when you said it.

Robert Francis: Yeah. I think that's something that I see a lot where people who are going by wrote the old the older Nautilus system that called for leg press first. I think people do better with leg press in the middle and some preparation of the knee before leg press.

James Brown: Yeah, great. No, that's how I… my default will be to program the extension last.

Robert Francis: Yeah, I found that to be the best. I found that to be, uniformly well-received by people.

James Brown: Smashing. Thank you.

Lawrence Neal: Awesome. Thank you, James.

Steve, you can chat is just to say when you can talk, though, I can unmute you. Do you want to, do you want to talk, Steve, or do to ask on your behalf? What do you want to do?

Steve Berthiaume: Yeah. Thank you for doing this. One question I get when I see a new client is, "I can't do squats or wall sits because my doctor says my knee is bone on bone." So, is *bone on bone* like actually a thing and is it a dangerous thing?

Robert Francis: That's oversimplification.

Steve Berthiaume: Okay.

Robert Francis: I've seen very few people who really could not do knee extension.

Now depending on what knee extension you have, that can make a very big difference.

For the most part, physicians, sports medicine, doctors and orthopedists, they are used to seeing the squat or the leg press performed the way they see it. If precautions or if your style of exercise is such that you remove the likelihood that you're going to get an injury and… the injury is going to happen in one of two places: It's going to happen back in the stretch where you're bouncing out of where you're bouncing out of the stretch, or we would say the bottom of the squat or the bottom of the of the leg press.

And the other place you're going to get the injury is at the very end. And that's usually from locking the knee, as long as the knee doesn't lock out… and in the MedX leg press, a lot of leg presses, it's possible to preclude lockout to the point where your patient gets out to full extension, cannot lock the knee, no matter how hard she pushes. It'll become so habitual that they won't lock their knees ever in a leg press. The danger is in locking the knee.

You don't want to lock the knee because under a meaningful load, that knee could get damaged because you'll have not exactly bone on bone, but you'll have made a tower of the leg with the knee straight and you'll be supporting all of the resistance on the soft tissues of the knee.

That doesn't happen as long as the terminal end of the leg press doesn't lock out. If one knee should unlock under a load or under a meaningful load and the other knee doesn't lock out, you'll get an instant injury if both knees lock out. Over time you're likely to cause an injury just from locking out under a meaningful load. Without the lockout, the leg press is safe.

Now, at the other end, at what we call the lower turnaround is that… let's say you use the full range where you're touching the weight stack to the bottom. It ought to just almost not touch. You do want to touch so that every repetition is exactly the same. But you don't want to jump out of the stretch. That force or that sudden increase in torque is dangerous.

Or the other half of the story is that may not be the danger. The sudden reduction or sudden unloading of the torque could be dangerous. So, you want to avoid sudden loading and sudden unloading.

I tell people to try to move at a pace of one inch per second. That usually gets people in, and different people have a different definition of *one inch per second*.

But as long as you can control the acceleration, you can control the change in speed. You don't want changes in speed. And you don't want sudden acceleration. You don't want a sudden drop off in the resistance load you want, the load to be uniform from start to finish that finish doesn't lock out and that, and the start doesn't jump out of the bottom.

That's where the danger is.

Steve Berthiaume: Okay. Thanks. I appreciate that. I would translate that into my style.

So, I do basically body weight. There's no machines in my program. So, we typically do a wall sit. I would max them out at 90 seconds and then we would go into some body weight squats.

So, I'm thinking what I'm hearing is I can tell my clients that as long as we're not locking out at the top or unloading at the bottom, and I don't think they're going to unload at the bottom with a body weight squat.

Robert Francis: It would not be harmful to have a bench at the height that you want them to stop in the bottom, where they can barely touch with their butts, the bottom, and then come up and as long as it'll become habitual, they won't lock the knees. If you stop them, you tell them, “There — that's where you stop,” and then they go right back down.

And it's a funny thing, because my kid is 14 and I've been working out with him for just about forever and he started wrestling about three, four years ago and, first practice, second practice, third, after the first week, everybody got sore knees.

And of course, yeah, they do squats. It's almost pathological that his knees won't straighten at the top, no matter what, he is trained. And it's so habitual that the knees don't lock at the top, that his knees just don't ever lock.

And you can put a barbell across his back. You can put a belt squat around his waist. It never has to be corrected. He's the only guy out of 30, 40 new wrestlers who didn't have sore knees after the first week.

Steve Berthiaume: Awesome. Thank you very much. I appreciate it.

Lawrence Neal: Great stuff. Great questions, guys. Thank you. We'll certainly allow you to talk. Go ahead, Robert. Where does Steve practice? Massachusetts. Is that right, Steve? If I can be wrong you can't chat, can you? I'll allow you to talk. Just give me a second.

I've got to fix this so that you can chat. There you go, Steve.

Steve Berthiaume: Okay. Yeah, I'm in Massachusetts, right in… right up on the border with New Hampshire.

Lawrence Neal: All right, cool. Before I ask the guys again, because I think they've, James and Steve might have more questions. I'm going to ask a question that was submitted on the post here. So, let's see. Got a question from Ben Schwab.

Ben's just got… these are some of those points I sent you, Robert. He just had three questions or three topics, general shoulder pain. Maybe we can talk about that a little bit because we talked mostly about legs, so can you just give an overview of general shoulder pain that you see that you have experience with and the types of protocols.

Maybe give us a handful of protocols you might use to help alleviate that for someone.

Robert Francis: Most shoulder problems are in impingement. I think a lot of us use the rowing torso. We talked about that last time. We weren't exactly sure. It's the shoulder exercise.

Lawrence Neal: Yeah. Okay. I remember this time.

Robert Francis: The position you have is far more amenable to shoulder impingement than the than the retrofitted with the handles and the arms will cross in front and they'll come back, and that's the old legacy style that was done in the old Nautilus days.

Hands come out in front, and Bill DeSimone is not going to be happy with me very much for saying this, but you see this exercise.

Now in the case that you don't have a rowing torso, there's an exercise that's become very popular: it's a very elbows-high, pull from a cable machine with a pair of handles. Twisting the handles outward gets almost very close to a rowing torso effect.

Of course, with the attention to the speed of movement, very often, two other problematic exercises can be a press or a fly kind of emotion. I'm not against that. I'm not against the fly motion like in on a 10-degree chest, but usually there's a specific plane that can be used. So, you may want to change the angle in order to get an arc of motion.

The worst for shoulder impingement is usually a press. It's usually an overhead press, but strengthening the shoulders directly, is best with that kind of a high pole or rowing torso movement.

But I have used for… shoulder rehab. I have rehabbed hundreds of shoulders using a pullover machine — pullover strengthens the shoulders enormously, even though they're not directly involved. The structures just below the shoulder give great support from below.

And another thing I had wanted to mention, several books that would be helpful for people.

I suppose you could find them on eBay, but there was a book I got about 30 years ago by Tom Kelso. Have you heard of the Kelso Shrug System?

Lawrence Neal: I know Tom Kelso. I don't know about the system.

Robert Francis: That book is very helpful. There are a large varieties of ways of shoulder retraction that get to so many of the structures in the shoulder that are hard to get to with larger multiple joint exercises.

The Kelso shrug system specializes in a lot of shoulder retraction with very little or no elbow flexion. That's been very helpful.

And the other thing, of course, is training larger masses of muscle to accelerate the effect of the much smaller, more isolatory, exercises that you use on the shoulder.

But some people can do some pressing. Universally, pressing is for later. Yeah, early, early training. I would say, pullover has been very helpful.

Shrugs, Kelso shrugs from various, various different positions, and the rowing torso kind of high pull exercise, not the high pull that looks like an upright row.

Lawrence Neal: Just a follow up question on that. High pull, rotary torso move. No, what's it you called it again? High pull. What was it? The row. How did you label that? Sorry. The Kelso shrug. No, the one where you're like, you're pulling like this and you're externally rotating.

Robert Francis: I was calling that a high cable pull.

Lawrence Neal: Okay. Just on that… because it's really interesting what you said about the lats and I'm trying to think what this person might ask as a follow up, which could be completely off, but just for a little bit more detail, my understanding is that's going to stimulate the posterior deltoid.

I could be off, but it doesn't get at the rest of the shoulder, but you said something about that. It can support the lats or stimulate the lats. I'm just going to help them with that shoulder recovery. Just wondering if you could speak more on that in your experience.

Robert Francis: Yes, because what you have is you have a joint that's compromised.

You may not even be able to train specific muscular structures that are the problem at first, but there is a muscular sleeve surrounding that joint. So, you train whatever you can in order to get that larger cross section of musculature surrounding the joint. So, whatever the sleeve around the joint is, we want to thicken that.

And make all of the structures there larger and stronger.

Lawrence Neal: Got it. You got me thinking of… I'll pass you over to one of the guys in a minute. You got me thinking of Doug McGuff who would often talk about how when he first saw a cadaver for the first time, he couldn't discern muscle groups because they were so tightly interwoven.

And he used that point to explain to me once that it's not to say that a lot of exercises are wasteful, but he was trying to explain to me that people don't understand just how much musculature you recruit when you do a big movement, 'cause he couldn't even see the difference between where one muscle began and one muscle started. And I thought that was quite a good analogy to represent that.

So, what I'm hearing when you say that is if you're doing that movement, you're, like you say, you're recruiting so much around it, that sleeve, as you put it, I can see how that can rehab the area.

Robert Francis: That's right. And a pressing movement that which is what we usually think of for shoulders is likely completely inappropriate for a shoulder impingement.

There's a large amount of muscle producing a press, but you may make a problem worse because it could be running over the smaller structures, and it's likely not even muscle. It's more likely going to be connective tissue, but eventually, but seated row is well tolerated.

And of course, you have to mind your P's and Q's and you've got to hold the shoulders down and your style of training really makes a difference. You can't pull it like you're pulling an oar on a boat. It's got to be shoulders first, elbows next, and everything back.

And the same thing with a pull down. That's also going to be largely inappropriate for most people with a with a shoulder impingement. They'd need to start with pullover and seated row. But it's the same thing from the, top, shoulders first. And elbows next.

And really high intensity. We've spent so much time thinking about exercise performance. And that's the reason why I think that we keep the forces of physics down and we keep the momentum at a minimum. And we have specific ways of teaching exercise that make it far more amenable to a rehab protocol.

Lawrence Neal: Yeah, it makes a lot of sense. So James, I'll hand over to you for a minute here. You're on.

James Brown: Thanks, Lawrence. Yeah, interesting stuff there and Rob, on the shoulders and rows, and I've got a Tricky shoulder client who I haven't been putting on the pullover, so I'll definitely do that.

There's two sort of big problems, topics left, Lawrence, in what people have asked, including me.

One is more stuff on the back. The other is pelvic floor diastasis recti and post C-section. So that sort of whole postnatal body. So, I guess I leave it to you or Robert to choose what to go for.

Lawrence Neal: Yeah, whatever Robert wants to go for.

Robert Francis: All right. I'm training an expectant mother right now, and she's seven weeks out.

In the third trimester, what an expectant mother begins producing, compounds: One is called elastin, one is called relaxin. And what those what those hormones do is they, in the case of relaxin, it softens the uterus so that it can grow larger. Elastin is nonspecific.

It'll affect all the joints in the body. And what it really does for the expectant mother is it prepares pubis bone where the, in the front where the pubis bone is connected. It will soften the connective tissue and allow the hips to widen in expectation of transit of the of the baby because elastin and relaxin are not so specific and they affect every joint.

They will affect also the abdominal muscles, and the abdominal muscles are now being Stretched. The lady I'm training, of all things, she's a high-intensity trainer herself. In fact, she had been Adam’s fitness director for a number of years.

She's seven weeks out right now. This is her fourth baby. We had two weeks ago completely stopped any kind of abdominal exercise. For one thing, you've got a very bad angle of pull. You've got the influence of elastin and relaxin softening the tissues of the of the abdominals in particular, the connective tissue between blocks of muscle.

And that's where you can get these tears, and that's what we’re talking about. I would say, third trimester, leave out specific abdominal work.

It gets to a point where very little could be done except maybe leg scissors. And that'd be about the last thing you would do. But third trimester, leave out the abdominal work so that there's less, far less stress on the abdominal muscles.

You can and ought to still be training adductor. That is strengthening to the pelvic floor. Was this the pelvic floor question also? I think so.

That's also will maintain the strong pelvic floor because what happens in so many expectant mothers is they start getting pain, and without exercise, the back begins to hurt.

This should be like a whole ‘nother podcast. It's really interesting what happens to the body with changing leverages in pregnancy and how that affects the body.

The hamstrings and the back muscles at first start to become stronger and stronger as the baby starts to grow. And the leverage starts to change as her center of mass begins to move outward. Those muscles begin to get stronger and stronger through the first trimester.

By the time you're into the second trimester, what'll happen is the rate of growth is too great for the body to accommodate. That's where you start getting the pain on the back of the legs, the pain in the low back because the body where the changes in leverages represented a load that the body begins to accommodate for and get stronger.

It's now happening at a rate the body cannot keep up and starts getting weaker or causing overuse atrophy. And with without maintaining without exercise, there are some women who end up having bed rest for a lot of their third trimester, and the danger there is the destruction of the muscles because now you've got disuse everywhere.

The pelvic floor muscles have to be really maintained as best you can in pregnancy, because Years later, especially after delivering multiple births years later, the pelvic floor weakens to such a degree that you can have [the] uterus fall out of the bottom, and maintaining is relatively simple.

Intense leg press will, in most cases, go a long way to maintain the pelvic floor, but certainly adductor… and you want to not encourage a future problem.

And also for men, I get looked at sideways when I put a man in the adductor and people think, “Oh, that's a girl's exercise”.

But Adam's not usually happy when I tell them that it's the *anti-pee-in-my-shorts-every-time-I-laugh-or-sneeze* exercise — they usually get it.

Your bladder sits on the pelvic floor, and a lot of incontinence in older age comes from the weakening of the pelvic floor because the bladder is a muscular organ. And when it wants to expel its contents, it needs something to squeeze against.

And if it's squeezing against the pelvic floor that's weak, it goes nowhere. It squeezes and nothing comes out because it needs to have a firm pelvic floor to squeeze against. That's also for us to maintain that pelvic floor and to keep those structures very well in tune.

And also, hard leg training decreases transit time when it comes time for delivery. You get faster transit time and faster recovery postpartum.

Lawrence Neal: Wow. That's incredible.

I just wanted to have a quick question just on what you were saying there about male pelvic floor: So, are you, in summary, saying that if, a man is doing a leg press and he's got an adductor, in his routine, he's good — he doesn't need to do direct pelvic floor work?

You know where, for instance, Kieser Training have this very elaborate machine where you sit on it, and it actually… there's like a piece of metal or something around in between a pelvic floor, and you're playing a game. Like, you're playing like a game on the screen, and every time you clench the pelvic floor, and when me and the missus were members at Kieser Training in London, she'd use it, and she thought it was all the rage.

But I'm just curious, is that kind of redundant if a male is doing a leg press and an adductor, or are there exceptions?

Robert Francis: The Kieser device is one for delivering time static contraction.

Lawrence Neal: Yes.

Robert Francis: It'd be done with a yoga block between your knees. But with adductor… is really another way to do it.

I should say maybe timed static contraction is maybe another way to do adductor

Lawrence Neal: I guess I hadn't thought I've done adductor, obviously with timed static contraction or dynamic movement, but I've never thought that my pelvic floor is being recruited when I do it. I just don't feel like it is. Maybe it is. Maybe it's unavoidable.

Robert Francis: First repetition, no; second repetition, somewhat.

But when you are very close to that failure point, the body recruits everything that it can, and the brain is really bad at discerning one thing from another. There is an order of muscle fiber contraction or an order of muscle structure contraction.

You see, if you put someone in a MedX low back machine, you'll see the opposite phenomenon that you see in a MedX overhead press with the upper handles — they're completely opposite.

When you're in the overhead press, you feel very strong with an appropriate resistance. That's going to limit you to 75 seconds. You feel like you can do it forever, until you can't. And that comes really quick.

The MedX lumbar is completely different with an appropriate resistance that first repetition, and you've got to be really careful with people, because people sometimes react in a way, and you have to anticipate that. But with an appropriate resistance, a lot of times you won't finish the first repetition in a MedX lumbar.

By the third repetition, it's the opposite — you think you can do six more because there's an order of muscle recruitment. And I'm not talking about muscle fiber recruitment. I'm talking about individual muscle.

You've got paired muscles on each side of the spine, and they all join in at a little bit of a different time, and it's the same thing with adductor and a pelvic floor.

You'll never feel it… pelvic floor unless you really take that thing to the end, and you gotta have an appropriate resistance and something that's going to cause you failure.

The way I do adductor – and I don't know that a lot of people do it this way; I don't see anybody where I am doing it this way – I have the movement arms closed. I hold the movement arms closed. They sit with their back facing the seat. They sit, bring the right leg over. I'm on the right side of the machine because that's where the lever is and that's where really I need to be.

They hold. Hold. I let go. It doesn't move. I've got the stopwatch in my hand. I don't hit that stopwatch yet. Holding, holding, holding. Move it out a couple of inches and stop. They move it out a couple of inches. They stop. Back in. Squeeze it. Now go out a little bit further than that, but not much further.

Back in, squeeze it again. Now I hit the stopwatch. Now carefully look for the stretch limit. The wider you go, the slower you need to make it. Feel it barely touch, come back in, don't speed up and squeeze it again. Hold the squeeze. Go back out, retaining all the tension on those muscles on the inside thigh.

70 seconds of that. You're going to feel it right in the *taint*. You have the taint in England?

Lawrence Neal: Yeah, we have the taint. Yeah. We're familiar. Yeah. Thank you for that, Robert. That was perfect. James, sorry I interjected there. Do you want to ask one more question here? And then we'll wrap up.

James Brown: Yeah, that's great. Thank you. I guess we could round that off maybe with Robert's thoughts on postpartum, after the delivery, how do you get back to abdominal work? What's the sort of way to play it?

Robert Francis: I don't think you need to do anything direct.

Front grip pull down is going to provide enough abdominal for several weeks.

I would say that once they begin training again – and it might be two weeks – you don't need anything direct to the abdominals. Let that body go back on its own to some degree.

And my plan with my trainee is to rely really on front grip pull down and getting her back into the low back machine, which she doesn't fit in right now.

She's seven weeks out. So, I'll get her right back into lower back.

Now if you have a rotary torso machine in your facility. I would say that would be the start of your abdominal program before you go to anything that looks like a crunch or a sit up or something like that.

James Brown: Okay, that's fine. I have a pullover as well as the pulldown. Is front grip, is that pronated? Is that the same thing?

Robert Francis: I'm sorry?

James Brown: A front grip pull down. Is that a pronated grip?

Robert Francis: I usually have the hands facing in and open and against the bar. At Fort Washington, we have a 1st generation pullover, very early generation. Here in my studio, I use a an S.P.O. 3 of a generation 3 pullover.

And so I, have the hands facing against the bar and driving all with elbows, but yeah, pullover is excellent for that. That would be perfect, but going direct to the abdominals, I would say if you have, one, a rotary torso would be the would be the very best.

James Brown: Okay. Thank you.

Lawrence Neal: Is there a misunderstanding there, James? I might have missed something there.

James Brown: No. So, it's not what's wrong with describing a neutral or supinated grip, which is what I would normally do. So rather than, pronated and I don't have a rotary torso, but yeah, I can just… it's like Doug McGuff was talking about for people with osteoporosis, that's the pullover is.

Provides a great option and the things that Robert said about the shoulder are even more interesting. Such a different machine, isn't it?

Lawrence Neal: Awesome. Yeah, I feel that was excellent. Thanks for your questions, James. Yeah, look, I feel like we could just do a full Q&A sessions.

I think that's where a lot of the value is: it's just giving guys the opportunity to ask people like Robert questions for an hour.

So, look, that's the end of our time today, and Robert, thank you so much for making the time. Great to talk to you again and really grateful.

I think it's been really valuable, really helpful to the guys that participated.

And we're going to publish it inside the forum, and this is going to be very helpful to other high-intensity trainers who are trying to get this stuff right. So, I appreciate it.

Robert Francis: You're welcome!

Lawrence Neal: What's the best way for people to find out more about you or contact you, if that's okay?

Robert Francis: xanderinst@aol.com.

Lawrence Neal: Thank you. I'll put that in the show notes as well on the forum so people can drop you an email if they've got other questions. And maybe we'll do more sessions like this as well in the future.

What else is there to say? Oh yeah, just quickly for everyone tuning in we've probably got Katie Santos featuring next month.

She'll be talking about HR and legal stuff.

So not as interesting maybe as today, but still very important in how we figure out. What's that?

Robert Francis: Speaking of legal, in the United States or in, New York, you cannot call what you do physical therapy.

Lawrence Neal: Yes, that's a very good point.

Robert Francis: Yeah, you have to use the term *rehabilitation*, as *physical therapy* is very specific, and they *will* take you to court.

Lawrence Neal: I think Patty Darrell made that point pretty clear in a mastermind recently. Thank you for clarifying that though.

Yeah, so just to say to everyone, Katie Santos is gonna come and do some HR legal stuff next month. Again, not as interesting, but vitally important to get that stuff right in your business.

Robert, we'll say goodbye. Thank you so much, and I'll talk to you again soon, good sir!

Robert Francis: Thank you so much, that was awesome.

Lawrence Neal: Thank you, talk soon, take care, bye!