

Lawrence Neal: Today's guest is Bill DeSimone. Bill is a personal trainer known for

his sensible biomechanics based approach to the world. Also

strength training, sorry, and it's the go to biomechanics expert for

some of the best personal trainers in the world like Dr. Doug

McGuff, Skyler Tanner, and Simon Shawcross. Starting as a trainer

in 1983 in New York city, in 2006 he opened his own studio Optimal

Exercise in central New Jersey. He is the author of Congruent

Exercise, how to make weight training easier on your joints, and the

upcoming Joint Friendly Fitness, your guide to the optimal exercise

program. He has presented at national conferences, provided in

services for private studios and consults online all by phone with

individual exercises. Bill, welcome back to the show.

Bill DeSimone: Well, thank you Lawrence. That sounds pretty good. It sounds like I

wrote it.

Lawrence Neal: Yeah, well, if I had actually read it properly, it would have sounded

better. I hope that is somewhat up to date, that bio for you.

Bill DeSimone: Yeah, I've tweaked it just a little bit, but that's good enough to start.

Lawrence Neal: All right, cool. So how have you been anyways? I don't know

exactly how long it's been since we spoke, but it feels like it's been

about a year.

Bill DeSimone: Yeah, I think so. I think we spoke after I had blown up my shoulder.

Lawrence Neal: That's right. Yeah.

Bill DeSimone: Which was... It was in the fall of 2016. And then, so I guess it took

about a year of, well you know, a year of formal rehab and then another half year getting back to normal, so to speak. So, yeah. And

I think we spoke after that where I elaborated on misguidedly

covering a pool and exploding my own shoulder. So...

Lawrence Neal: How are you now? How are your shoulders now? How are you

feeling?

Bill DeSimone: Well, it's funny, the repaired shoulder is... I don't have what I call, I

don't have any awkward strength. So you know, sometimes, if I go

to do something, if I get set it works fine. But if I just kind of blindly

try to push something or pick something up without getting set, I'll

notice a little bit of weakness on that side. But in all fairness, it's not

that different from the right shoulder, which wasn't repaired. So it

might just be, you know, 60 year old shoulders. 60 year old

shoulders don't endure long or they don't have too much staying

power.

Lawrence Neal: All right, fair enough.

Bill DeSimone: So, but selfishly, it's been interesting in how I've had to adjust my

own working out. And so things I suspected before now I know are

absolutely true. So I am now-

Lawrence Neal: Can you elaborate?

Bill DeSimone: What's that?

Lawrence Neal: Oh yeah, can you elaborate on that? That sounds really interesting.

Bill DeSimone:

Well, for instance, like pressing over head, which previously theoretically I thought was potentially problematic. Now I know, "Oh no, that's problematic." Just because of the shoulder's a little more sensitive to... Like a technically wrong movement that I could get away with say through age 40, now that the shoulder's repaired and it's a little more fragile and plus I'm 20 years older. Now I know right away like, "Okay, this is not a good move to do." Now what's interesting also though is that the repaired side might actually even be bigger than the unrepaired side, which I'm not quite sure how that happened. I mean I did a lot more rehab on that side than on the intact side, but I wasn't really expecting to see a visual difference. So I'll be interested to see if that evens out over time.

Lawrence Neal:

Yeah, I mean that's so unusual. Do you mean in terms of like you've got more muscle mass in the shoulder that was injured than the other shoulder? Is that what you're saying?

Bill DeSimone:

I actually think so. Yeah. I mean, it's hard to measure. It's obviously, it's just visual. And maybe it's the way I hold it now, maybe I just unconsciously hold it a little bit differently.

Lawrence Neal:

Could the body be compensating because the injury giving you more, I don't know, kind of cushion and shock absorption around the joint? Could it be something like that?

Bill DeSimone:

Could be something-

Lawrence Neal:

In which case we should all just injure ourselves to get really muscular, right?

Bill DeSimone: If you want a peak in your biceps, rupture your biceps and it'll peak

nicely. Yeah.

Lawrence Neal: We don't recommend that by the way, if you don't get the joke.

Bill DeSimone: But actually, in a bigger view of things after after age, say 40 or 50,

normal is to lose muscle mass and lose bone density. So if you just

stay even, you're actually doing pretty well. It's actually quite an

accomplishment. So I don't... It'll be interesting to see, I think I was

less considered myself in really good shape when I did the pictures

for Congruent Exercise, which was seven years ago, seven or eight

years ago. So I'm kind of curious to see how I've changed when I

have pictures taken from the new book. I'm very curious to see

what kind of difference there is.

Lawrence Neal: Sure. Well, so what have you been up to project wise? Like what

have you been working on since we last spoke?

Bill DeSimone: Well, the big thing that was I added interns at the studio and so

since December I've had three interns from the Rutgers exercise

science department or Rutgers exercise science majors and, it's

funny, I first had the idea around 2014 as I was starting with the

Joint Friendly Fitness type book and I thought that since my

resources, my research is limited to Google and whatever cheap

textbooks I can find on Amazon and online, I thought if I had a

current student they'd be able to check what I was doing against

what they're currently learning and that they would have access to

academic search engines. And bureaucracies being what they are, I

just wasn't successful in getting them, actually getting an intern sent to the studio until just this past December.

Bill DeSimone:

And then I had a great response. I had about a dozen people apply. So I took two first and then I took a third one over the summer and it's really been, for me personally it's been great because I don't have them just observing. I don't just sit them there and they observe, half the time they do observe or I give them stuff to research or I give them my stuff too. "Tell me how great it is." So that's good. No, I give them my stuff and I give my stuff to review, but I also tell them, "Look, if this contradicts what you're learning in anatomy and biomechanics, tell me. I'll change it." And so far it seems to have been okay.

Lawrence Neal:

Cool.

Bill DeSimone:

So far I ripped off the right stuff. You know, I stole from the right information, but it's also a way for them to see what I'm doing in the studio without me talking them to death. So I give them a flash drive or I give them links to the videos and PDF's of stuff I've written or the PowerPoints I've done. So they can review that on their own time, at their own pace. And then when they come in the studio for the other half the time, we can review that and then we can put that into practice.

Bill DeSimone:

So between that and another thing has been very interesting is that even though they work out, the high intensity style, for lack of a better phrase of deliberate repetitions and precise, precise working out leading to a high effort, that seems to be pretty much invisible...

It's certainly invisible academically with what they're learning. And even in their recreational exercise, it's like a revelation to them. So like the first couple of interns just slowing them down and training strictly and feeling their muscles burn was like a revelation to them, it was a shock. And then this third intern, he's a little more of a martial arts background. So he didn't like look at me aghast when his muscles started to burn. He actually lets me push him a little bit.

Bill DeSimone:

So it's interesting in that this is not even let's say a Darden type of workout. Like I'm not even coming close to pushing them to failure, so to speak, but it's still harder and more deliberate than they've trained before. So to me it's kind of interesting that it's brand new to them. Even though it's something I've lived with for 40, 50 years or so, and it's an interesting way of kind of feeding the bottom of getting this information out there. So now when they go to workplaces and they go to train people, you know, they'll be putting it out there fresh. It's not just like limited to our studios and our little kind of niche.

Lawrence Neal:

Yeah, well if it's such a revelation to them, what were they doing before in terms of strength training?

Bill DeSimone:

Well, okay, let me tell you about, I'll talk about the third intern, Nick. Nick being a martial artist or being into martial arts as well, actually, you know, this kind of gets to the overwhelming glut of exercise information that's out there, that it's very different than 35, 40 years ago. So 35 or 40 years ago, so 70s, early 80s, there was a small body of information. There was like Cooper's aerobic stuff. There

was Jones and Nautilus and Menser Darden that, you know those two camps. There was bodybuilding camps and if you wanted to get into it, there wasn't that much stuff to sort out, you know, you'd either went the bodybuilding route or the Jones Darden Menser route or the Cooper aerobics route, but there really wasn't a lot of clutter in the way.

Bill DeSimone:

And personal training clients back then were paying for access for that information. Then it started getting some media attention. So if they connected with a trainer, it was to access that information for the client. 30 years later, there's this overwhelming glut of information and what personal training clients are really paying for is for the trainer to weed out what that client doesn't need to know. So in the case of Nick, the third intern without the Nautilus Darden Jones material being prominent online or in other media, he was trying to kettle bells, he was trying dead lifts, he was trying whatever the Instagram fad of the moment was and getting banged up doing it. So he was very receptive to my stuff as far as that.

Bill DeSimone:

Now the two young women who were interns before, you know, I think they had some exposure to conventional health clubs, which again, the deliberate type of training that we're kind of influenced by, doesn't really exist in the mainstream commercial health clubs. And I think while they have perfectly fine physiques for women their age, I think they were kind of just going through the motions on the machine or on an exercise. You know, "I'll do some of these, I'll do some mobility work, I'll do some abs, I'll stretch, I'll lift the weight," without any real structure to it. So anything goes, it's a hard thing to

sort out. So like I said, for me to introduce them to something I've been living with for 40 years and they see it as very clarifying, that's a very interesting phenomenon.

Lawrence Neal:

Yeah. That's so cool. Do you get, like, do you see aha moments as you're kind of talking about this stuff and then demonstrating it in person?

Bill DeSimone:

Well, yes. In fact, I've put little clips of video on Facebook with some of those aha moments. There's one of Sabrina doing a chin up and I've, you can see she's trying to rush through it and I'm verbally slowing her down. And then when she gets off the machine, the face she makes, I mean, I roared when I saw it on video afterwards. And then I had Emily doing a wrist roller and she's-

Lawrence Neal: I saw that one, yeah.

Bill DeSimone:

Yeah, with the primal scream at the end. So you do see that moment where they may not be the like technically perfect, but it's a big improvement to what they were doing and that sensation of, "Wow, this muscle's burning," or like, "That effort was very intense. You know, what is this?" You're right. That's very cool. And again, that's something I've taken for granted for all these years.

Lawrence Neal:

Yeah, it's very difficult. And one thing I've found is the more you get into this and the more you learn, the more challenging it is to put yourself in the shoes as someone who is like right at the beginning of their journey or has no idea.

Bill DeSimone: Yes.

Lawrence Neal: You probably told me that ages ago and I remember Drew Bay said

to me once, he said, when I was first getting into this stuff, he said,

"You know what? You've got an advantage because you are not

where I am. You're closer to the beginner and you can kind of

bridge the gap a little bit." But I do struggle with that and I've since

learned how to better simplify what I'm saying to people so that it's

meeting them where they are. And that's proven to work really well.

Bill DeSimone: Yes, yes.

Lawrence Neal: Yeah.

Bill DeSimone: And that's a good phrase. That's right. You have to meet people

where they are, if you want to connect with them. You know, I've

seen enough bad presentations... It was interesting, especially

dealing with college students. If I go to a presentation, well I

recently went to a presentation on crowd funding and the person

giving the presentation, this is a one night talk and the person giving

the talk was a college professor and they presented as if this was

day one of a 14 week course that you were a captive audience for. It

was awful.

Lawrence Neal: Yeah.

Bill DeSimone: And I notice, you know, I was working up a chin up video with Nick,

third intern, and he sees me tearing the sheets up. He goes,

"What's the problem?" I said, "Oh, that sucks." He said, "No, I

thought it was pretty good." I said, "No, Nick. You're used to being

in a class that you know you're going to be there for 14 weeks. And

you know, if that first presentation, if the first few words of the presentation are boring or if it leads with the detail and takes 14 weeks to get to the point, that's what you're used to as a student. If we're communicating this on social media, you got to get to the point immediately and then fill in the detail," which we then did by basically reordering everything I had just done. So meeting people where they are, if you want to connect with them and not just show off how much you know, that's the whole key to communication, especially in the internet social media habit we've gotten into.

Lawrence Neal:

I also think that it's kind of a win-win in a way because when you get into health and fitness or if you're trying to become a personal trainer, you quickly realize that it is so vast. There's so much to learn and you'll always be learning. And it's very intimidating because you go down one rabbit hole of one nuance in fitness and it's enormous, right? In terms of the amount that you can learn and it's also quite scary because you realize how much you don't know. The more you know, the more you realize you don't know and when you meet someone who doesn't need to know all the science and explanation behind why you do what you do and all they want to know is how to do it and why it might benefit them, it's quite liberating because it means that you don't necessarily have to memorize all of the stuff to explain the technicalities behind something.

Lawrence Neal:

That's not to say you shouldn't obviously amass a certain amount of knowledge. You absolutely should. I think as a personal trainer, obviously you want to understand how to avoid injury, how to do exercises correctly, the core fundamentals of fitness, but what I'm

trying to say is you don't necessarily have to memorize vast amounts of knowledge beyond that because that's not really going to serve anyone. Is kind of why I'm picking up on, yeah?

Bill DeSimone:

As a matter of fact, I would say that's a discourager to the client, if you try to... Let's put it this way, because I heard in some of your podcasts you're thinking of starting a studio and I know you're going in more of a business direction. The client already assumes that the trainer they're talking to knows more than them about exercise. You don't have to prove it.

Lawrence Neal: Yeah.

Bill DeSimone:

What the client wants to know is, is this person going to talk down to me? Is this person going to be rude? Is this person going to be an ass? They just want to know if they can work with you personally. They assume you know and I've been saying for the 25 years I've matched trainers or hired trainers, that 51% to 99% of success as a trainer is your interpersonal skills, right? So somebody could be technically awful and if they can connect with people, they're going to do well at least financially. But that means it's on the trainer, it's the trainer's obligation to know what they're doing because if the client likes the trainer and they get hurt, the client says, "My back went out on me, my shoulder went out on me."

Bill DeSimone:

But if the client doesn't like the trainer and they get hurt, even if they're not training with the trainer, the client will say, "The trainer hurt my back." And not every client, but I'm just saying the interpersonal skills, piece of this is very important, but the technical

part is almost invisible. You as a trainer, it's on you to make sure you're not just getting away with something. You're actually coaching it the right way because the client's not going to know the difference unless and until they get hurt. And something you said also is along these lines, even though I've described myself for awhile as hit influenced, not a hit purist, the context though is if you start with whatever version of hit you like whether it's Darden or Dr. McGuff or Hutchins or whatever, if you start there as a base and you have to make adjustments or compromises off that, it's still a manageable amount of information. But the problem today with anyone getting an exercise degree or anyone getting certified as a trainer or anyone, God forbid, looking on Instagram for exercise advice, anything and everything goes. Good stuff goes, bad stuff goes, absolutely wrong stuff goes. And if the person has a nice enough body and the video is shot well enough, people try to copy it.

Bill DeSimone:

That's tough. I don't really know... If I was starting as a trainer today, I would definitely steer them towards, well what I did with the interns, I steered them towards Darden's stuff and then we adjusted from there because that's a finite amount of information that's useful and usable. And you're not getting overwhelmed with too many different things that contradict.

Lawrence Neal:

Yeah, his writing's good in that it doesn't, it's an easy read isn't it? And it doesn't feel too overwhelming. So I understand why you'd start there. So let's get into talking about some of these different exercises that we were chatting about on Facebook. So I reached

out to you quite a while ago now with, you know... For those that don't know, Bill is like my remote physio therapist/personal training advisor and he was always quick to say, "This is my opinion and I've not seen you and it's probably wrong and blah, blah blah." But all the same, I still really appreciate it. And you know, I had a recent injury with basketball and I think it's fairly complex and we can talk about it. It's a shoulder injury.

Lawrence Neal:

And so I reached out to you because I think I'd watched your video on YouTube, which is excellent. And I will link to this in the show notes, which demonstrates a congruent chin up and you talk about the problems with the shoulder in certain hand positions. And I kind of reached out to you and said, "I guess I challenge one of the assumptions around, is it important to have... Can you partially supernate? Can you fully supernate? Is it really going to impinge the shoulder?" So I figured, you know, we could talk about this, maybe set the scene for people first. Maybe you can just talk about some of the fundamentals for doing a congruent chin up in your eyes. Or maybe we can address my specific situation. I mean I don't mind how you want to approach this.

Bill DeSimone:

Well, I mean just tell me... Tell me a specific situation and then I'll tell you if chin ups are relevant. And then we'll get into a general conversation about the chin up.

Lawrence Neal:

Yeah, that sounds logical. So this is interesting. So firstly, you know, who knows what caused the shoulder injury. I just know that I had, when I play basketball, right, I'll obviously attempt to block

someone with my right hand and when I block I'm rotating at the shoulder joint and swinging my arm and I also have a bad habit of blocking someone with my or attempting to block, I don't always successfully block people obviously, but I'll attempt to block with my right when it would make more sense to block with my left. So maybe there's overuse and when I played basketball since I'm 11 you could perhaps attribute that to an overuse injury. I don't know.

Lawrence Neal:

However, I'd been doing... Sorry. So I did feel pain in my shoulder during that basketball match. And then the day after an event, a basketball event, I had the pain waking up and it was pretty sore and it's kind of come and gone since then. And this is a good like month ago. However, I've also been doing other things that may have been compromising it, such as doing a chin up where I've been doing a relatively close grip, so slightly narrower shoulder width, and completely supernated hand position.

Lawrence Neal:

And after watching your video, I wondered whether I had just aggravated an already injured shoulder, which I don't even know. I haven't been to a physio, let's just be clear. I haven't been to a physio. I don't know where it is and I'm not sure if it's my rotator cuff, I'm nor sure if it's some other ligament in my shoulder. And I've kind of gone the route of letting it heal naturally/occasionally using very slow, safe strength training and not doing anything silly and taking a break from basketball and it's kind of starting to clear up, but then I do something silly and it kind of comes back a little bit. But yeah, that's the context. So, where do you want to go from there?

Bill DeSimone:

Okay. So this is interesting, this is good. Right. So basically when you block a shot in basketball, right, your arm is obviously above your shoulder, your arm is overhead, right? Maybe not completely 180 degrees reaching for the sky overhead, but it's definitely above your shoulder, right?

Lawrence Neal:

Yeah.

Bill DeSimone:

And now I happen to have in front of me the sports injury guidebook, which I just coincidentally have. And in the section on shoulder impingement, it says if the structures of the shoulder are ineffective and stabilizing the humeral head within the socket during overhead motions, the humeral head might migrate upward out of the socket causing the impingement.

Bill DeSimone:

So what that means is as your arm is above shoulder height, say to block a shot or to swim over hand or throw a baseball over hand, et cetera, or do a chin up, if your upper arm moves upwards, in other words, your shoulder approaches your ear, that's a particularly unstable position for the shoulder. And so when you block a shot, so now you're in that unstable position and now a force gets applied to it. so there's not a lot of room in the shoulder, and with arm over head there's even less room, so what happens is the humerus pinches tendons, ligaments, rotator cuff, versa between the head of the humerus and the AC joint in the shoulder, or technically the acromion and any AC joint and humerus.

Bill DeSimone:

So the point being that overhead is inherently a vulnerable position for the shoulder. And when you apply extra force to it, it creates a scenario where this impingement is created...

PART 1 OF 5 ENDS [00:29:04]

Bill DeSimone:

It creates a scenario where where this impingement is created and then what happens is it swells inside. Which means there's less room in the shoulder and so the next time you aggravate it, it swells again, meaning there's less room in the shoulder. Eventually it turns into an itis, a bursitis, a tendonitis, arthritis. And then eventually over time, over years you possibly tear your rotator cuff.

Bill DeSimone:

In the meantime with deterioration leading to more pain, leading to less movement, leading to less movement, causing more pain, leading to less movement. And so it's a vicious... A downward cycle. So the point isn't by the way, never move your arms over head because, well that's part of sports. But pitchers who pitch repetitively or in your case, it's more acute, right? Because when you block a shot, that is an acute event that hurts right at the moment. But a lot of times it's overhead movement stuff. It's not an acute injury. Your shoulder doesn't explode like mine did or yours almost did. It's just more deterioration internally.

Lawrence Neal:

Yeah. The funny thing is, is if I make contact with a ball it's probably less painful. It's actually almost like this force of the swinging motion that causes the pain. And then it got... It's weird. When I first started doing it, or when it first started becoming apparent, it wasn't

pain, it was just discomfort. I just would do it and be like... Like I'd attempt to block somebody, I'd swing my arm, I'd swing through the air, miss it. And I would just think, "Oh that's going to go in a minute." Like at some point that is going to start hurting. That's kind of the alarm signals I was getting. Yeah.

Bill DeSimone:

Well again, not having x-ray vision, but things are probably a bit irritated. Okay? And so that every time you move it and the irritation rubs on itself, it's going to get a little more irritated. And that's just the nature of a chronic condition. If it doesn't calm down and you reaggravate it, it gets a little bit worse and so on.

Bill DeSimone:

So the overhead motion is a really vulnerable position for the shoulder, just because there's not a lot of internal room. And the reason why chronic things are problematic is it's not a stabbing injury. Like when I did my rotator cuff, that was rare because I did a specific thing, I felt the specific pop, and that was the injury. And in your case, let's say you tried to block a dunk for instance, and your arm is all stretched out like that and now there's a lot of force coming backwards at you, all right?

Bill DeSimone:

You can say, "Okay, that specifically did it." But if you use too much of a range of motion in, say a chin-up, that's a little sneakier, because you're not going to get that dramatic snap, or pop, or crack. But it is going to be adding to the wear and tear. And you'll only know when the pain sets in. And then in hindsight you'll figure it out. Which is really the tough part I have with a lot of my material, because people think I'm talking about only acute, immediate

injuries and I'm not, I'm talking about setting yourself up for the chronic wear and tear or deterioration.

Lawrence Neal:

Yeah.

Bill DeSimone:

So let's talk about where chin-ups fit in here. So I'm glad you mentioned a grip closer than shoulder width. Because I think it's obvious if you're using a palms facing you grip on a straight bar, and if your hands are wider than shoulder width apart, there's obvious hand, and wrist, and elbow strain, right?

Bill DeSimone:

So, and I also know the Arthur Jones Nautilus rendition of the need to supinate your biceps... To supinate your forearms so that your biceps are in a stronger position when you're doing pulling movements. Pull-downs and chin-ups. However, when Jones and Nautilus came up with that in the 70's or so, in the context of what was being said in the muscle magazines, it was a good analysis, right? Because at the time, the muscle magazines would write things like, 'A wide grip, develops the upper width of your lats, and a close grip develops your lower lats, and a medium grip develops your center lats." And that's just myth. That's just wishful thinking, or that's just reacting to the sensation.

Bill DeSimone:

So compared to that, bringing up supination of the biceps is a better analysis. Okay. But with the advantage of 40 years and a lot easier references to have, and I don't want people to come to my house with pitchforks and torches, Arthur Jones fans go on the warpath against me. But what that analysis falls a little bit short of, it ignores the joints. So if you're on a straight bar with a palms facing

you grip. Okay. So what I want you to do right now is put your elbows and your forearms and your hands together in front of you. So to like the finish position of a pec fly. Okay. And now try to lift your arms overhead.

Bill DeSimone:

If you're holding everything together, you're going to find some tightness in the shoulders, right? I can't see you, are you trying that right now?

Lawrence Neal:

I'm trying it with a massive microphone in my hand.

Bill DeSimone:

Oh, sorry about that.

Lawrence Neal:

But yes, no I can't do it, and I can feel the tightness. Yeah.

Bill DeSimone:

Okay. So for people at home, what I'm suggesting is, in front of you, bend your elbows at 90 degrees. Put your hands, your forearms and your elbows together touching. Okay? And now try to move your arms overhead. And you'll find within an inch or so of moving your elbow that your shoulders get very tight. Okay, that's not muscular. That's the ligaments in your shoulder are binding. Okay? And if you want your arms to go overhead, if you want them to go further up than say shoulder level, you have to open up your elbows. Technically you have to internally rotate, and that frees up the binding and your arms can go overhead.

Bill DeSimone:

Now if you were to take a super close grip on a chin-up bar or pull-down bar that's straight, and it's supinated, that that binding in the shoulders still happens. Only now you're using your body weight to try to stretch through it. See, again, that binding isn't muscular.

That's not a fault of how you trained or how your muscles developed. That is the ligaments that hold your shoulders together. So if you continue to sink your body weight through it, or try to, you're at some point you're going to stretch those ligaments out. And then it becomes laxity. And that's something you have to correct. That becomes a problem.

Lawrence Neal: What does laxity mean?

Bill DeSimone: Well, it means they're too stretched out.

Lawrence Neal: Right.

Bill DeSimone: But it's different from flexible. Flexible implies the muscle is flexible.

The muscle can give. Laxity implies that the ligaments are too stretched out. So the ligaments being too stretched out is like having the foundation of your house crumble. The muscles can be super strong, but if they pull on the bones and ligaments aren't holding the bone in place, because they're too stretched out, it doesn't work as well. It's like having flat feet where the ligaments in your feet are all stretched out. No matter how much you developed the muscles below your knees, your feet will continue to be flat.

Bill DeSimone:

So the problem with this hard, supinated grip like a palms facing would grip on a straight bar is, as you lower yourself, you're running right into the the ligaments binding. Now the reason why... Now in that video I use the Nautilus Assisted Chin Machine that I've gotten from Greg Anderson. And instead of a straight bar, built into it was an EZ Curl Bar. So you're not fully supinated, you're partially

supinated. And would that partial supination does is, it gives you elbows a little more wiggle room so that you can position your elbows, so that you bypass that binding position and use more of a range of motion.

Bill DeSimone:

An alternative to that though is you simply don't go down as low as you... If you have to use a straight bar with the supinated grip, simply don't go to say straight elbows. You're going to have to experiment with the grip to find where you can get some range of motion that doesn't run into the ligament binding and stop short of where the ligaments bind.

Lawrence Neal:

So you can use that as a litmus test for yourself. And you'll probably go into this, I know. And I want you to, certainly want you to elaborate, but you talk about how everyone's ball-and-socket joint in their shoulder can be slightly different in terms of the room that the ligaments have. And so when someone's listening to this and they're thinking, or they're next going to do a chin-up. And they're trying to find the ideal hand position and range of motion that works best for them. I suppose if they feel a certain amount of tension in their shoulders at the a contracted position, or even...

Bill DeSimone:

It would be the bottom position.

Lawrence Neal:

Sorry, the bottom position then is that not a litmus test to kind of say, well, the more tension you feel there... Which I think we all can distinguish what that feels like. I hope. Then maybe it'd be a more ideal to move towards a safer hand position than what was causing that?

Bill DeSimone: Well, yes, but part of what's gotten very garbled in the the muscle

media is that the idea of attaching sensation with a good effect. So

if you don't do that exercise where you touch your forearms

together and see where your shoulders bind without the load. If you

just think, "Okay, I'm going to do a chin-up with the full range of

motion and supinated grip." When you feel that tension, you think,

"Oh okay, that feeling is my lats working or rear deltoids working."

And it doesn't really occur to you that that's the wrong sensation, or

that's the wrong conclusion.

Lawrence Neal: Okay. So [crosstalk] fool yourself, basically.

Bill DeSimone: The context matters. If you do leg extensions and your quads burn,

yes it's a quad exercise, but if you do a leg extension and your

knees ache, that's a different sensation. And if the only things you

read are where, "When you feel it burning or do you feel at aching,

you're shaping the muscle", or, "That's proof that the muscle is

working more effectively." Then it's easy to confuse the joint strain

sensation with effective muscle work as a sensation.

Lawrence Neal: Yeah. Cool. Okay.

Bill DeSimone: So what I would suggest is, if you only have a straight bar as your

option. Okay? Somewhere between shoulder width and your hands

touching. There's going to be a hand position that you can get more

of a range of motion before you feel that binding kicking in. So if

that's your option, that's the one to use. And don't let your body

weight stretch you out so far that your shoulders are up by your

ears, for instance. Because now you're running into the ligament binding and you're running into the impingement.

Lawrence Neal:

Yeah, I will just say Bill, because I know it can be so hard to describe these things without exercise demonstrations or images. And it can be quite difficult doing a podcast. So just so you know, all the links to everything you're talking about, the demonstrations from your YouTube channel will be in the show notes. So people will be able to actually watch that and listen to you elaborate as well. So just to give you some... Yeah.

Bill DeSimone:

And you know what I'll do is, I'm doing a video with the intern on the chin-ups. So I'll make those clips accessible to you so you can see exactly what I'm talking about.

Lawrence Neal:

Cool.

Bill DeSimone:

So that's if you only have access to a straight bar. If you have access to the EZ Curl handle where you're partially supinated, that's a good choice. If you have access to a neutral grip, so your palms are facing each other, they're parallel. Also a good choice. And if you have access to some kind of rotating handles so that the handles will follow your hands and wrists rather than you having to follow the hard bar. Those are also good options as far as minimizing the joint strain during the chin-up.

Lawrence Neal:

Because most places have the parallel handles. I think most gyms will provide that. And that sounds like the safest option and

providing probably the same development for the lats and biceps and so on as any other hand grip would.

Bill DeSimone:

Well, see, now this gets interesting again here. Because which grip you use really only determines, well determines the joint stress, number one. But it really only determines which muscles assist. So for instance, if you were to use a palms facing you grip, either on a straight bar or the EZ Curl Bar. Your biceps are in position to help and your pectorals, okay? Because if you notice your elbows, your upper arms, is sort of in the pec fly position. And you can test that out by training your chest very hard first, and then going to the chin up. And you'll see how much your performance is affected on the close grip chin-up by exhausting your chest first. Okay.

Bill DeSimone:

If you go wider, if you use the parallel grip now because your radius crosses over, your biceps really aren't in position to help as much, but your brachioradialis in the forearm is, okay? So you're really not going to lose too much there. And then if you go get wider, again, to a palms facing away from you grip and shoulder with or wider, now your pectorals are so stretched out, they really can't help. And again, it's going to be to brachioradialis over the biceps helping.

Bill DeSimone:

Now here's the thing, the old Nautilus literature said, "Use the supinated grip because you can use a heavier weight, which will be better for the lats." But I don't think it works that way, because what happens is that heavier weight is being handled by the assisting muscles. The lats are always going to be the prime mover in any kind of chin-up, right? Because the lats are the biggest muscle that

creates shoulder extension, or drawing your arm back towards your body. So whichever chin-up you do, the lats are always going to be the prime mover.

Bill DeSimone:

The difference in weight that you can handle in all those three variations is due to the number of assisting muscles. Not necessarily because it's better for the lats.

Lawrence Neal:

Right. Okay. Right. Okay. So you're saying that when you increase the load, a lot of those other muscles are basically being called into play to help assist with that you're not necessarily recruiting more of the latissimus dorsi in that moment.

Bill DeSimone:

Right. So let's say you can use 150 pounds on a close grip pulled down, and then when you try to use the wide grip, 150 pounds is clearly too much and you have to drop it down to a hundred in order for you to do it safely. One or the other isn't necessarily better for your lats, but the wide grip, your biceps and your pectorals can help as in the close grip, they can help. So is one better than the lats or not? You can't really say, because the lats are the prime mover and the amount of weight you're using is changing.

Bill DeSimone:

Now as a trainer, as somebody who's into it, that might be interesting. But where it's useful is if you have a beginner, or a very deconditioned person, and you go have them do a pull-down or a chin-up. You would want us to start that deconditioned or that beginner with the closer grip movement, because they're going to be able to handle some weight. If you removed the pectorals and the biceps from the pulling action, you may have to reduce the

weight so much that it's very demoralizing and they feel like they're not getting anywhere. So if you start with them on the one that uses more muscles, at least they can see some progress to keep them interested and keep them enthused. And then at a certain point when they've built up enough on the combination exercise, then you can experiment with the variations that require less weight.

Lawrence Neal:

So I wanted to go back to that interesting point you made about the shoulder, and maybe, well definitely recommend listeners to watch the video you did on this, which we'll embed. Which where you talk about... Is it a glenoid? Which is attached to the scapula, and how these space between... Within the ball-and-socket joint is different for different individuals. And so in some cases there's plenty of room where... Well, there's more room for ligaments so there's less risk of shoulder impingement. And in other cases, there's very little room. That's where this problem starts. It's quite individual. So do you want to... I don't know if I've understood that correctly or whether you want to elaborate on that?

Bill DeSimone:

Right. We'll strike that comment about the glenoid, because frankly, I don't have my textbooks in front of me, so I don't recall every structural little name here. So there's a couple of things. I think in that video there's a diagram, and it's an overhead shot of a shoulder. And it shows the humerus being the ball and the effective socket that it's working in. And where it's an individual matter is how much that socket covers the ball.

Bill DeSimone:

So if it's relatively deep, that person's going to have less room to move before they start hitting an impingement. And if it's relatively shallow, they're going to be able to do things like a press behind the neck or a behind the neck pull-down without all the complications, because they simply internally can move their arm that far before impingement's happen.

Bill DeSimone:

The problem, of course is we don't have x-rays of our shoulders when we walk into a gym. So you just have to go by observation. So pretty much everyone is fairly safe with their elbows in the so-called scapular plane. So somewhere between your upper arms being parallel and your upper arms being straight across. Somewhere in there, just about everybody has room for the shoulder to function safely. But at the extremes is where it gets very individual.

Lawrence Neal:

And one of the questions I had about the form is at the top of the chin-up, you recommend a slight crunch. Do you mean a crunch of the abdominals? Would you mean by that?

Bill DeSimone:

Well, at the top of a chin-up, especially with the parallel or the closer grip. So what happens is the lats connect the upper arms to the pelvis. Okay? But the abs connect the ribs to the pelvis. So it's sort of a natural flow as you're pulling into the top of a chin-up for your body to recruit the abdominal to help. Or let me put it this way. You're not actively helping, but don't worry about preventing it. It's very unnatural to try to keep your abdominal slack at the top of a chin-up.

Lawrence Neal: Hence why you want to swing your legs forward. Most people want

to do that when they get close to failure on a chin-up.

Bill DeSimone: That's right. That's right.

Lawrence Neal: Right, that's so interesting.

Bill DeSimone: Because your body is going to recruit the next closest muscles that

approximate what you're trying to do, which in this case would be your abdominals, because they're connecting your ribs to your pelvis. So that's right. And also where you see it is when people are doing bad, sloppy crunches on the floor. And their hands are behind their head, and as they're trying to bang out the numbers, their elbows flap forward as they come up. Because while the abdominals are pulling their ribs towards their pelvis, as they get fatigued, the next closest muscles are the lats pulling your upper

arms towards your pelvis.

Lawrence Neal: So they're working their lat at the end of that.

Bill DeSimone: Well, they're using their lats to affect the crunch. And as a matter of

fact, I knew somebody who had asthma one time who had really ridiculously developed lats. And what she explained to me was, is when she would try to do sports and the asthma would kick in and she would rest with her hands on her knees. Her lats were trying to

help breathe. So her lat were trying to assist with the breathing as

the breathing got harder.

Bill DeSimone: So the abdominals and the lats, it doesn't appears they're

connected, but there is a natural flow there. So I wouldn't do a hard

crunch at the top of a chin-up, but it's a natural consequence of being near failure. And I think if you see, for instance, if you see the person's also now they really starting to kick their legs forward. You as the trainer, correct it one time in case that they just lost their train of thought. But if their lats are so fatigued that their bodies getting their abdominals involved, the lats are fatigued enough.

Lawrence Neal:

Yeah. Yeah. Awesome. And just kind of about what you said there, about the lady you mentioned who would put her hands on her knees. I was only aware of this was one of those old wives tales. But I was always taught when I was younger that after you've exhausted yourself from like an event, or run, or fill in the blank, it was always better to stand up straight and put your hands behind your head. And the idea being to open your upper body, to open the lungs and enable you to better recover, acutely. But obviously the body wants you to buckle over forward and put your hands on your knees, right?

Bill DeSimone:

That's right.

Lawrence Neal:

And I'm thinking after hearing you say that, I'm thinking the body knows what it's doing, right? So is that one of those old wives tales, when actually just listen to what the body wants you to do. Because probably it's recruiting other muscles to help the process along.

Bill DeSimone:

Yeah. The standing with your hands over your head, certainly is unnatural feeling, right?

Lawrence Neal: Very unnatural because it's hard to do. You have to consciously go

and do it. And it takes discipline. Whereas the buckling over, hands

on the knees, or just lying down to the ground is far more natural.

Bill DeSimone: With the hands on the knees, what's happening is, you're trying to

exhale, right? So sometimes with asthma, the person can't exhale

as well. So what the lats are doing is they're helping pull down to try

to exhale. But also, let's face it, there's probably a moment of panic

where things are going haywire and the body's trying to do anything

to relieve that discomfort.

Lawrence Neal: Right. Okay.

Bill DeSimone: And I try not to bring myself to that point when I work out

nowadays.

Lawrence Neal: Yeah. I probably don't get there very often in high intensity training,

but I will occasionally get there in basketball, but yeah, I don't do a

lot of it.

Bill DeSimone: That's true. Yeah. I can see that.

Lawrence Neal: Yeah. Yeah. Yeah. Anything you want to add on the chin-up in terms

of form? One thing I notice you didn't mention was the starting

position. Do you want to just elaborate on that for a moment?

Bill DeSimone: It's funny. Starting position, when you have an assisted chin

machine, you start sort of mid-range, right? I don't do body weight

chin-ups anymore mainly because of the shoulder surgery. So I only

use the assisted chin machine. I'm able to start mid-range and then

I lower myself to where I want to start. But obviously if you're jumping up to a chinning, the conventional way to use a chinning bar. Obviously you're going to start with the shoulders up by your ears and you're all stretched out.

Bill DeSimone:

I think if you just avoid that fully stretched out position in the course of your set, and if you only start there and only finish there, you're probably going to be okay. I would just suggest against if you're doing a 10 reps set going in and out of that position on every repetition. And I certainly wouldn't bounce out of that position. And again, it won't be an acute injury but that's just adding wear and tear to whatever other wear and tear you brought on to your shoulders.

Lawrence Neal:

One thing I know is from watching some of your videos is, you don't seem to be so strict, correct me if I'm wrong, about a very, very, HIT purist... Well and then when you say it's a purist, this is just quite popular in HIT, a very smooth turnaround. It doesn't seem that you are as strict about that, because I noticed when going into the top position in a chin-up, you will kind of reverse direction somewhat faster than I would have expected. Have I misinterpreted that, or is that because you're just not as concerned about some of the other people in this industry about these kinds of flawlessly smooth turnarounds. [inaudible] into the movement?

Bill DeSimone:

Well, I think the concern with the turnaround is that's what they would call a heuristic, which doesn't necessarily apply in each individual case. So...

PART 2 OF 5 ENDS [00:58:04]

Bill DeSimone: Case, so if you're in an exercise with a lockout, rather than lockout

and pause in the lockout, which is a waste and just puts stress on

the joints, yes, the smooth turnaround is appropriate, but in the top

of a chin-up, you're not locking out at top of a chin-up, number one,

and number two, you're not near ... you're near the end of the lats'

useful range of motion, so there's really no benefit to holding the

top position.

Bill DeSimone: Now, I don't think I bounce in and out of the top.

Lawrence Neal: You don't bounce, no.

Bill DeSimone: But I slow down a lot when my upper arms are at about a right

angle to my shoulders, right? Because that's where the lats is

strongest, so if you're going to spend time, you want to spend time

where the muscles can create peak torque, not the minimal torque.

Bill DeSimone: You know, so as a rule of thumb, I remember Mentzer writing that

you should pause at the top and bottom to make sure you have

control, right? But that's a rule of thumb. That doesn't necessarily

apply to every single exercise, some of which has a lockout. Now, if

I was going to chart how fast I move in a rep, I slow down where the

joint angle for peak muscle torque is.

Bill DeSimone: Not necessarily at the fully stretched or fully contracted position. I

also, since I did that video, I've changed how I do reps now to

where I aim to do 10 reps in one minute, so I set my timer for 30

seconds and at the end of that 30 seconds I want to be at five. If I'm

at four, I know to speed up, if I'm at six, I know to slow down, with the goal to finishing the 10 at around a minute.

Bill DeSimone:

If I hit ... and then at the minute I decide either to do another 30 second negative, and then to do another rep or two at the same, deliberate speed, and if I can go on til 90 seconds then I know it's time to add the weight. I wasn't quite, you know, the old advice, two seconds up four seconds down, or four seconds, one second pause, four seconds. That just drove me crazy, trying to count the seconds of each rep.

Bill DeSimone:

Now I just aim for, like I said, 10 in a minute as a general rule, so I don't get too obsessed with a pause at the top, pause at the bottom. If I'm doing 10 in a minute, that's about effective enough, and I'm not going to worry about each individual, the number of seconds in each individual location.

Lawrence Neal:

Sure. Is there anything else you want to add on the chin-up, or are you all right to move onto the next exercise? It's probably that one-

Bill DeSimone:

You know what? I believe anything else I add on the chin-up I will make available to you in our video, in our slides in the video, because I really think we've gone into the weeds quite a bit on the chin-up, haven't we?

Lawrence Neal:

Yeah, it's good, though. It's really interesting stuff, and I think it's really useful, but especially alongside the video content that we talked about, I think, gives people a really good understanding as to

how they should think about chin-ups in their own training and with their clients.

Lawrence Neal: How are you doing with time, by the way?

Bill DeSimone: We're good, we're good.

Lawrence Neal: Yeah? All right.

Bill DeSimone: Yeah, we're good. Let's-

Lawrence Neal: Just keep me posted and we can obviously wrap up and maybe do

a part two if we don't finish.

Bill DeSimone: I think your listeners probably have more a problem with the time

now, because they're probably, "The hell Is this guy babbling

about?"

Lawrence Neal: I doubt that, I doubt that, people love listening to you. Okay, so leg

press. This is an interesting topic. How? I mean, again, I was just

going to ask if you wanted to just kind of open this one up by

talking about your feeling around proper biomechanics for leg

pressing, you know, the types of machines that people should look

out for, and the things they should avoid.

Lawrence Neal: Do you want to start there on this one?

Bill DeSimone: Yeah. That's good. I especially like the Nautilus Nitro leg press.

Whenever I've said or someone has said, somewhere online, I said

something about preferring leg presses to squats, but I meant

specifically the Nautilus Nitro leg press, because you can adjust the

back angle and it has, the curves of the spine are built into the seat back.

Bill DeSimone:

On the Nautilus Nitro leg press, on that specific model, you can open up the back so that you're kind of mimicking the squat position, and if you prop yourself up or just raise yourself off the bottom seat, you can fill in the gap in your lower back which is going to help your spine posture hold. On old fashioned leg presses, like the 45 degree, or the really old ones that are vertical and you're lying on your back.

Lawrence Neal:

Yeah.

Bill DeSimone:

Especially the vertical ones, it's almost impossible to protect the curves in your lower back, and then when you read in the muscle magazines, you know, "Allow your knees to come all the way into your armpits," there's no way you can do that without your pelvis flipping, and completely losing the curve in your lumbar spine, which is the textbook definition of loading the spine inflection, which you're supposed to avoid.

Lawrence Neal:

Did you want to just touch on why that's dangerous?

Bill DeSimone:

The normal curves in your back, with the normal curves in your back, the pressure on the discs is even because the shape of the individual vertebrae, they're not like legos. They're not perfectly cubic, or round, or, excuse me, the vertebrae aren't perfectly squared off. They're irregularly shaped so that when they're stacked

on top of each other, the curves result, and in those curves the pressure on the discs is even. It's flat.

Bill DeSimone:

When you come out of the curves in your lower back, now the vertebrae tilt and that's where you pinch the nerve on one side, and you herniate the nerve on the other side. Now, your back allows that, okay, because without that you wouldn't be able to move, number one.

Bill DeSimone:

Or you wouldn't be able to turn, or twist, or look up, or bend over. But if you put extra load, like a barbell, or a weight, or a kettle bell, now you're putting the disc in that vulnerable position with extra force and extra reps. If you work out in a mirror, you can keep an eye on your posture, so for instance something like that upside down leg press where you can't really see your lower back, first of all, it's just physically impossible to let the weight descend so far that your knees are in your armpits without losing the curve in your lower back.

Bill DeSimone:

But you're not aware of it, because you can't see it, so especially if you're doing a leg press because you want to save your back from the stress of doing a barbell squat, you've just defeated the purpose. Now, even on the nitro leg press, if you had the seat up vertically, like 90 degrees, and your seat is too close to the platform, now your knees are going to be driven into your armpits, and you're going to lose the curve in your lower back, and you gave back whatever back safety guideline you were trying to observe, you just gave away.

Bill DeSimone: Now, I don't know what other manufacturers are doing. I don't know

if other manufacturers are building the curve into the seat back. I

know some build the reverse curve, which I do not understand. You

know, absent, and I guess if you had a leg press with a flat back,

you can always put a towel under your lower back to help support

the curve, or a lumbar cushion. Again, probably not the type of thing

that would be a stabbing injury, but at some point if your lower back

hurts and you've been allowing a leg press to push your knees up

into your armpits, that would be a place to look at to try to correct

it.

Lawrence Neal: Am I right in saying that you're not a big fan of the MedX leg press?

Bill DeSimone: In fairness, I haven't worked on it, but if I what I describe matches

that, well, let the chips fall where they may.

Lawrence Neal: Well, because it was certainly quite a controversial thing to say,

because a lot of people love the MedX leg press. You know, I

personally like using it. Now, I haven't used it-

Bill DeSimone: Actually, hold on a second. See, I would disagree that what I said is

controversial. Any manufacturer that builds into their machine

something that contradicts a back safety guideline, or that

contradicts conventional wisdom for the joints, that's the

controversial act.

Lawrence Neal: Yeah.

Bill DeSimone: Do you follow what I'm saying?

Lawrence Neal: I do.

Bill DeSimone: If you look at any institution's back safety guidelines, whether you're

talking about the government, medical groups, industrial groups, rehab groups, any group that puts out back safety guidelines will

say things like, "Don't load the spine inflection."

Lawrence Neal: Sure, yeah.

Bill DeSimone: If you build an exercise machine that loads, or design a free weight

exercise, that loads the spine inflection, and you're insisting that even though the conventional safety wisdom says not to do that, you're insisting that there's a benefit to it. That's the controversial

act, not applying the conventional safety guidelines to exercise.

Lawrence Neal: Got it, yeah. I guess what I ... perhaps I misused controversial, but I

just meant went against the grain in terms of the opinions within

high intensity training about, specifically, the MedX leg press. But-

Bill DeSimone: And that's fine, but I haven't heard them explain how you justify

reversing the curve in the lumbar spine.

Lawrence Neal: Yeah. Is that ... ? I mean, what is your understanding of the

problems, then, with the MedX leg press? Is it that it doesn't

provide that curve in the seat?

Bill DeSimone: Well, again, I'm not familiar with it so I'm not going to judge the

MedX leg press. I'm just going to say that the Nautilus Nitro leg

press that builds the curves in the seat back, if you're interested in

leg pressing heavily without jeopardizing your spine, that's the one to use.

Lawrence Neal:

Yeah, no, I see your point, and I mean it's been so long since I used a MedX leg press I can't remember if it does build the curves into the seat, but I think everything else about the machine is probably going to tick the criteria that you've listed there as being what you would expect from a leg press machine.

Lawrence Neal:

But no, I also want to say, I mean, one thing I've kind of realized lately or formed an opinion on, and I was having coffee with a friend about this recently, is it's really easy to become obsessed with Nautilus and MedX machines and just think that every other machine out there is crap, and whilst that might be true in the strength curves, and the friction, and some of these machines, it's really hard to find in other models.

Lawrence Neal:

You know, you can accomplish a lot with lots of other machines that are on the market, but there's a leg press, for instance, a leg press in this gym I was using the other day, and the brand was, I think it was Pioneer or something like that. Began with P.

Lawrence Neal:

You know, it was not Nautilus or MedX or anything like that, and I would have to double check about the seat back having a curve, but you know, everything else about it, it was very, very similar to the Nautilus Nitro leg press in terms of the way the feet plate moved, and it felt great, you know?

Lawrence Neal:

So, I don't know what ... what's your thoughts about people becoming so kind of, "No, you should only use these machines." Do you feel that that's quite short sighted and that there is lots of other machines out there that will be safe to use and deliver the same results?

Bill DeSimone:

See, I generally ... I would rather figure out, first, is I rarely will criticize a design, let me rephrase that, a brand name. Okay? Because they all experiment with different designs, and some are dogs and some are winners. Now, ideally, I would look for certain features, because those features lead to benefits, but the other thing I would want to do is I would want to figure out the workaround. If somebody has access to X brand machines, even if they don't have what I consider to be the right features, I would rather figure out, "Okay, and here's how we're going to use this machine to bring it closer."

Bill DeSimone:

Like I said, if you have a flat leg press, a leg press with a flat back that doesn't have the curve built into it, fine. We'll fit a towel in here, or we simply won't let your knees come back that far. Or if you have a chest press that doesn't have a range limiter, then I would try to find the visual cue that lets the user know when to stop the descent and when to begin the positive of the rep.

Bill DeSimone: It's particularly unhelpful to trash a brand name of machines.

Lawrence Neal: I agree.

Bill DeSimone:

Because, you know, I've gone into some people's homes for sessions and my first thought is, "Oh, you bought the wrong machine." But I'll never tell them that. I'll work with them to figure out how to use it safely. Because someone, somewhere, paid a lot of money for the machines, and none of them had ... it's funny. I like to say none of them have the market on the best designs for joint safety.

Bill DeSimone:

But the Nautilus Nitro came pretty close. But other brands have other individual pieces that match better, right? For a while, the Vogen side raise machines was to be face down, and you were doing the side raise with your arms in external rotation. Well, that was genius. That was perfect, and I don't believe I've seen one of those in 15 years.

Bill DeSimone:

I think MedX, like their design of the pullover, where you have independent axes so that you're not coming back in that hard arc, another good move. But unfortunately, I think, a lot of the manufacturers just throw features on the machine just to see what sells without matching it up against how the joints actually work.

Lawrence Neal:

Yeah. Just reverting back to leg presses for a moment, then, so, just very curious. You know, again, I will link to that video where you demonstrate the Nitro leg press. Your feet position in that are, probably can't really describe it too well, it'd be better for the listeners to actually see it, but one thing I notice is your toes are, they're just maybe a shorter with, maybe slightly narrow on the plate, and your toes are slightly outward.

Lawrence Neal: I mean, is that deliberate? Have you got any thoughts about foot

position on the leg press?

Bill DeSimone: Well, and again, going back to the old '70s muscle magazines

where they would say angle your feet completely out for the inner thigh, and pigeon toes for the outer thigh, or you know, turn your

heels out and calf raises for one head, and turn them in for another

head. I don't think it really makes a difference there. I think you just

position your-

Lawrence Neal: You used to do all that?

Bill DeSimone: In the '70s? Yes, because that's what Frank Zane and Arnold said to

do.

Lawrence Neal: A leg day must've been fun for you back then.

Bill DeSimone: Oh, yeah, yeah, yeah, yeah. Sissy squats and all sorts of silliness

that I would never do now, but so I think you just find the foot

position where your joints kind of flow. In other words, you can start

with, at the bottom of the leg press, you would like your knees to be

wider than your hips, the so-called frog leg position, and then as

they straighten out they're going to come back into line, so you start

with that as a rough baseline, but then you've got to go by your own

individual joints.

Lawrence Neal: And in terms of height on a horizontal, so something like a Nitro leg

press, I'm guessing you want to create right angles with your knees,

so that's kind of where you want the fight of the foot to be on the

plate. Is that correct?

Bill DeSimone:

Approximately, yeah. That's right, that's right. I'm not that tall, so my feet tend to go a little lower on the foot plate, and you're right. I'm not looking at the feet position. I'm more concerned with the knee position. Somebody, like a 6'5", 6'7" guy, if he put his feet at the bottom of the plate, his knees would be really bent at an acute angle, so yeah, you're right.

Bill DeSimone:

You know, a lot of times we get concerned with where the feet should go, or where the elbow should go, and really, it's what's happening at the knee or the shoulder. That's really important.

Lawrence Neal:

Yeah, that's what made me realize, when I was watching it, I was like, "All this time, I've been obsessing with where to put my feet," and you know, like you mentioned just there, but really, I should be looking at the alignment with the rest of my body. Like, where are my knees at in relation to my feet, and my hips? You know, so that's a really good way to look at it.

Bill DeSimone:

Well, see, now, but once you figure that out, the instruction has to be something that the user can relate to. When you as a trainer set somebody up on the leg press machine, you're going to set them up based on what you just said because you can see where their knee angle is at, but to tell the client, "Okay, the next time you use this machine," you have to tell them, "Put your feet here." Because they don't have that angle.

Bill DeSimone:

You got to give them a cue that they can relate to, so it might be the feet, or like you'll see on my chin-up machine, I have different

colored tape for different grips. This way, I can tell the person, "Put your pinkies on the yellow tape."

Lawrence Neal: All right, all right.

Bill DeSimone: Or, you know, you got to give them an instruction that they can

relate to.

Lawrence Neal: Because if you say, "Pronate your hands," they'll look at you like

you're crazy.

Bill DeSimone: They'll look at you like you have three heads. Right. That's right. You

know, put your hands three inches apart, no, you got to tell them,

"Put your hands on the yellow tape," or, "put your hands on the

orange tape," or whatever. And if the person doing the exercise has

to relate to what you're saying. Otherwise, they don't know what

you're talking about.

Lawrence Neal: That used to be what happened when people would say abduct

your humerus, or whatever, I would be looking at them like, "What

the hell are you on about?"

Bill DeSimone: Exactly, exactly.

Lawrence Neal: Just on one of the things you said, something that I'm very much a

visual person, so when someone describes something to me I really

have to try to understand it, and quite often I have to look at a visual

just to really kind of understand what they're saying, and one of the

things you said is about if your knees are kind of coming into your

armpits.

Lawrence Neal: Like, one of the issues you mentioned, like a 45 degree, or one of

those leg presses where it's coming directly from above, the pelvis

tilts. You said it flips the pelvis. Can you talk about what that means,

and also can you just describe why that's a problem?

Bill DeSimone: All right, so just get off the leg press for a second: if you were to do

a body weight squat, and you're watching in the mirror, or you have

your hand on your lower back, you're going to go down to about 90

degrees and you're still going to feel the lumbar curve is going to be

towards your belly.

Bill DeSimone: And then as you lower your ass close to the ground, you're going to

lose that lumbar curve. It's going to go away from your belly, okay,

as your butt is touching the ground, so that crossover point

between the lumbar curve being towards your belly, and then you

go down so low that it flips the other way, that's what I mean with

the pelvis flips.

Lawrence Neal: Right. Okay. I think I follow.

Bill DeSimone: So for instance, if you're just standing up, you can do a pelvic tilt,

right? You know, there's an anterior pelvic tilt and a posterior pelvic

tilt that you can do consciously, but if you're squatting or leg

pressing too deep, you can't control it. The weight is going to push

you into one of those tilts.

Bill DeSimone: And again, the problem with the pelvis tilting, it's not with the pelvis.

It's not even where your knees are. The problem is that your lumbar

curve that's supposed to be towards the belly, where the disk's

pressure is even, it not reverses itself and the curve is away from the belly, and now the vertebrae are not putting even pressure on the discs.

Lawrence Neal: Right, okay. Got it. Sorry, again-

Bill DeSimone: Again, probably not an acute, immediate injury, but over time it's

just more wear and tear on the discs and the structures in your

spine.

Lawrence Neal: Yeah, which is why this is a really important conversation, and

interesting to me, and I'm sure to many of the listeners, because we

want to find ways to, or want to make sure we're training in a way

that's congruent with safety and longevity, because anyone who

listens to this knows that you have to do strength training forever,

and no use doing stuff that's going to manifest itself in a injury or

issue later on in life.

Lawrence Neal: Better to kind of identify that now, and reduce that risk, so that's

why I love talking about this stuff.

Bill DeSimone: You know, while I'm pissing off the Arthur Jones and the MedX fans.

Lawrence Neal: Yeah, go for it.

Bill DeSimone: That's sort of the problem with relying on that stuff that was written

in the '70s, because I don't think any of those guys writing it thought 50 years later the same people were still going to be

working out. I mean, it just wasn't in their experience to have 50 and

60 year olds train like the 20 year old athletes they were training at the time.

Lawrence Neal: Was all the focus, then, around younger populations, when they

were doing demos and ... ? Was it all ... ? Yeah.

Bill DeSimone: But it was new. It was new, so whoever you were doing it with, it

was brand new. There wasn't any time for wear and tear to

accumulate. You know, if you told Darden or Mentzer in 1977, "By

the way, 50 years from now, people are going to be doing exactly

what you write right now," they'd probably look at you like you were

crazy.

Bill DeSimone: You know, it was brand new at the time. No one knew if it had

staying power. I remember asking at one of the conferences, a

couple of the old guard, "How has your training changed," or, "has

your training changed since 40 years ago?" And they all said,

"Absolutely." You know, bodies change over time. Joints change.

Bill DeSimone: And motivations, as we've talked about.

Lawrence Neal: Had they experienced injuries, like the longterm things, the kind of

things we're talking about where it's manifested itself later in life,

and had to change as a result? Had you had that conversation with

any of them?

Bill DeSimone: Yeah, but it wasn't necessarily ... I mean, some of us have had overt

injuries, and some of us, chronic conditions. Richard Witnet, I mean,

when he in 2002, before moment arm exercise came out, I did a

column for him sketching out moment arm exercise, and he

published it, so I wrote another one and it didn't get published, and I asked him. I said, "Dude, what happened to that second article I wrote?"

Bill DeSimone:

He goes, "Well, I ran it by some authorities, and they said it didn't have any foundation." So, I said, "Okay." And about 10 years later or so, he sends me an email that, "Oh, I've watched some of your videos, and I've gone back and read some of your stuff. Do you have anything new coming out?" And I said, "Yes, as a matter of fact, I have Congruent Exercise coming out. I'll send you a copy."

Bill DeSimone:

And I said, "By the way, did you remember telling me that my work lacked foundation? And he said "Yes I do." And I said, "So, what happened?" He goes, "I hurt a lot less then." So, you know, aches and pains accumulate. When they get your attention is probably very individual, but you know, goes with life experience.

Lawrence Neal:

Yeah. That's so fascinating. I enjoyed talking to Richard. I had him on the podcast twice. Not the best sound quality, but you know, you just do the best you can with what you have, and perhaps we'll do another podcast and maybe we'll work on that, but he's got a great pictorial on his website where it shows his progress over the decades, much like Clarence Bass, and that was really enlightening when Doug drew my attention to that.

Lawrence Neal:

Doug McGuff, when he explained, "Look how good Richard looked when he leaned out." When he was younger, he had a lot more body fat, and he just kind of, he didn't really look very defined or as

muscular, and then when he was a lot lighter in the future he actually looked a lot better and even potentially a bit bigger.

Bill DeSimone: I absolutely agree, leaner looks better.

Lawrence Neal: Oh yeah, yeah. And it's probably healthier too, so.

Bill DeSimone: You know, when we would talk about what's the best routine for

size, or for this, or for that, and you know, I might be somewhat dismissive of that conversation because none of the exercise matters as much as getting your eating under control and being

leaner.

Bill DeSimone: Get leaner, you're going to look a lot more muscular than if you're

looking thick, so I guess it's a choice.

Lawrence Neal: I'm just curious. You talked about, on the start, when you get to a

certain age it's about staying where you are is progress. Have you reviewed for yourself? Like, I don't know whether you get scans done to see how your muscle mass is, see where it's at. Are you

holding onto what you've got? Are you growing any new muscle, or

where are you at, Bill, in your own journey on this?

Bill DeSimone: I use the very scientific method of the mirror. The mirror, and the belt

buckle. The belt buckle technique of assessing my body fat. If I'm at

the last hole of the belt, I'm fat.

Bill DeSimone: If I'm at the third or fourth hole in, I'm in good shape. It's entirely

dependent on ... it's entirely dependent-

PART 3 OF 5 ENDS [01:27:04]

Bill DeSimone: It's entirely dependent on how sloppy I am eating wise, you know? I

think I've retained, well, like I said, I'll see, I'm going to get in as good of shape. I can over the next couple of weeks and we'll see

where it is compared to eight years or so ago or earlier.

Lawrence Neal: Do you tend to stay in pretty good shape all year around, or do you

have a habit of like, around Christmas time, putting on a fair bit of

weight? How do you fare throughout the year?

Bill DeSimone: I might swing five or ten pounds. With around Christmas time

probably being the worst, and that's fine. That's fine. I'd rather have

a social life in a ... for instance if I'm eating a meal by myself, then I

don't mind being very strict with it. If I'm in a social setting, I'm not

going to be a prima donna.

Bill DeSimone: I'd rather enjoy the company or whatever rather than peel the skin

off the chicken or whatever food fad is a current.

Lawrence Neal: I feel the same way. I have friends and admire them very much who

stick to their diet, and will never deviate even in a social situation, or

they'll eat before, or whatever. And I really admire those people,

because I don't think they're, they're not awkward about it. They're

not the type of people who are like making awkward for other

people, or aren't trying to be difficult. They've just, in my mind,

they've really just got their that shit together. And this is just their

personal choice. Whereas myself, I'm very much like you. If I'm

being a guest at dinner or I'm meeting friends, I'm probably going to

go for something that's high in protein, and it's probably going to be a animal based meal, but I'm not going to be really strict and make sure that I'm not ... I will have a dessert or I will have only a fair amount if that's what we're doing.

Lawrence Neal:

So I don't, yeah, I'm like you in that respect. And that might change as time goes on. But the way I see it, and I know we've probably touched on this in previous podcasts, is as long as I'm eating really well, kind of 80% of the time and really well for me, and obviously that's different for each person, but, and it's finding what works for you. And for me, that sort of high protein, low carbohydrate diet, I find that I maintain a very good body composition doing it that way. And then I might just [crosstalk] than I would've.

Bill DeSimone:

I did some work with the Zone diet guy, Barry Sears, about 25 years or so ago. And he said at the time, and he goes, the real answer is probably everyone has their own unique ratio of macronutrients that works best for them. He goes, and that's why different people swear by different diets because they've accidentally hit the ratio that's their ratio. And I think there's something to that, because I tend to be a little more, little less ... I mean I'm not a vegetarian by any stretch of imagination, but it's definitely not a prominent part of my diet.

Bill DeSimone:

But I have clients, some clients do well with no carbs, some people do well with predominantly carbs. You just got to find your, you got to find what works for you and that you can last with. Because otherwise if you're forcing it, it makes for a miserable experience.

Lawrence Neal:

And that's the key thing, isn't it? It's what can you sustain over the long term for you? It's interesting you mentioned about a [inaudible 01:31:01]. I was reading some like [inaudible] and I know that a lot of proponents of Mike will remember that he was a high carb advocate, and he thought that eating carbohydrates is really important if you're trying to maximize muscle mass.

Bill DeSimone:

That's right.

Lawrence Neal:

And I was reading that recently and I'm thinking, I just don't think that's true anymore. If you're getting, or not true anymore. But if that is actually true because if you're getting enough protein, and you're going to be getting glucose via gluconeogenesis; obviously if you're getting enough fat, you're going to be, you're going to be getting energy for ketones. So I'm, yeah, it is interesting how, I guess a lot of people seem to be still very stuck on that and they're not as willing to question it. And my opinion is that whilst yes, it might give you the, obviously everyone knows that if you're getting ready for a competition, you will eat carbs before in order to retain more water and look larger. Right. But day-to-day, I don't, well, maybe you're right. I mean, maybe it is individual and some people require more carbohydrate. Right. And obviously it also depends on the context, the demands of your sport.

Lawrence Neal:

If you're a crazy endurance athlete and then maybe, yeah, you want to do more carbohydrate. Or that, you're getting some fat adapted people doing that, too. But yeah, I wonder if that's a personal preference thing or not.

Bill DeSimone:

The fat adapted thing is interesting because those muscle magazines of the '70s would talk about their pre-contest diet, cutting the carbohydrates out and going into ketosis. But making a point that when the contest was over, you stopped eating that way, which is fascinating because now you have people trying to live that way. I don't have a dog in the diet fight. I'm more concerned with ... I really don't. I mean, a pattern that works for me, and that if a client asks for help, a pattern that works for them, and if people want to play dueling studies with this, proves that 80% fat is better than 80% carbohydrate, good. Enjoy. Enjoy. My interest is in helping the individual find what works for them.

Lawrence Neal:

Sure. Yeah, no, good point. And I know we've digressed away from the exercise for a moment now. Do you want to, if you've got time, should we just talk about the plank row for a moment?

Bill DeSimone:

Yes. That was a video I put up. I believe it's myself is there and one of the interns, Emily. So that, I know the CrossFitters and the TRX people think they invented it, where you're basically doing a, you're lying back, holding onto the suspension device and pulling yourself up as in, as if you're doing a plank row. Like you're, you're holding a plank and rowing yourself towards the ceiling, and you're holding onto the device. But that exercise has been around, I mean, I have pictures of Arnold in the '60s putting a broomstick between chairs and doing floor chin-ups or whatever they called them at the time.

Bill DeSimone:

And I have other stuff, and I'm sure that the excise existed before then because it, there's sort of like a go-to home, go-to home

exercise, short of a chinning bar or some kind of rows. So I've got the Nautilus Freedom trainer, and so I put the pin in the bottom of the stack so that the stack wouldn't move, and I adjusted the handles so that you could lie on the floor, grab the handles and pull yourself up towards the handles. But the problem was that even the occasional young trainee I have, after a couple of reps the full length of the body was so heavy that the form would break down and they would lose the plank or one shoulder would rise up or they were start to hunch over, it became more of a half-assed curl exercise.

Bill DeSimone:

So, the answer was to walk the person away from the support so that their body wasn't quite flat, like parallel to the ground, so that they were at, with their arms extended, they were at an angle. And that does work, but I had no way of calibrating it. So I came up with this grid that I made out of two-by-fours that I propped up against the machine and I numbered them so that at the furthest step out, when you pull yourself up, you're not quite vertical yet. And as you straighten your arms, you go back to say about a 60 degree angle and then every step as you got closer to the machine, your body got more horizontal. And I found that even some of the 75-year olds could do the first, second or third levels before they said, okay, that's enough, I've worked out.

Bill DeSimone:

And it's really, it's really almost like a ... it works in a lot of different ways. It's one of the few ways of rowing that doesn't jeopardize your lower back, because instead of being bent over, say a barbell or a dumbbell, now you are, you're just holding a straight position as you're doing the row. So you get the scapular attraction for the

traps and the rows, you get the lats because the exercise is hardest where the lats are strongest at the peak muscle torque for the lats. And you get some measure of core work because your hamstrings and your glutes and the muscles of your lower back are holding the plank. But what what I really liked about it is that instead of fumbling around trying to find the right position so the person could do a set of ten, say, or whatever, I could calibrate, okay, first step, second step, third step. And this is going to make a lot more sense when people look at the video.

Lawrence Neal:

I think you're doing get a good job there. I mean I've seen a video, so I know obviously what you're talking about.

Bill DeSimone:

And what I literally did was I had all these elaborate plans drawn up with the angles and how much distance between the rungs, and I went to the hardware store and I saw a little lumber I was going to have to buy and cut and I said, Oh, I've got to rethink this. And then I found the precut lumber section. And so I threw my plans away, and just used a precut lumber and it worked just fine.

Bill DeSimone:

So I made one version for the freedom trainer, and then I made another version to use at home against the door, which is much smaller and does use a knockoff TRX device. That video I haven't put up, but that one I'll put up soon. So I know myself training at home, back work was always the dilemma, right? You could always do pushups, you could always do body weight squats or dumbbell curls. But unless you had a chin-up bar, safe back work was always, always a trick. And this one though, this one does the job.

And like I said, I think pretty safely, right? Being able to calibrate it helps.

Lawrence Neal: No, I think it's great. I think it's a very cool invention. And as Emily

said, you've probably got a potential business idea in that, I think.

Bill DeSimone: I thought she said I left that in the video, son of a gun. I, Oh, I didn't,

I have no, I have no intention of going down that rabbit hole.

Lawrence Neal: Yeah. No, I don't blame you. Let's stick to -

Bill DeSimone: People want the plans, I'll let them have the plans for now. Getting

into manufacturing and merchandising and stuff and Nope. Nope,

Nope.

Lawrence Neal: Yeah. It's a tough, tough game now for sure. So just a couple of

questions on that. So I'm assuming that during just like any body

weight row, you're keeping your glutes tight during the entire

exercise.

Bill DeSimone: Yes. [crosstalk 00:12:16]. Well, that's part of the plank aspect of it,

right is you're holding your trunk steady, or your post or your chain,

you're holding that steady, right? Again, if someone can't hold it

steady, I would correct it one time and if they, because maybe they

just lost the train of thought. But if they really can't hold it steady,

exercise is over. Time to do something else.

Lawrence Neal: Right. So you see that as an indicator that they are fatigued and

they could end up doing some harm to themself if you didn't stop

them at that point.

Bill DeSimone: Yeah. Yeah. That's as good a marker is any.

Lawrence Neal: Yeah. And I'm just curious, do you think this is a sufficient exercise

for the lower back as well? Maybe we're going to go on to that

anyway as an next-

Bill DeSimone: That's an interesting question. It's sufficient in that you're practicing

holding your posture. Okay. So, while, it might not help you lift a tree off the ground, in the course of your day as you're doing whatever the physical parts of your day are, you do want to hold onto, hold your posture when you're, again, whatever the physical

So in the sense that you are using your upper body to pull while you're managing the posture, it's probably good practice more so

parts of your day are, you do want to manage to hold your posture.

than say a chest-supported row machine where your lower body is

completely uninvolved. So is it sufficient for the lower back?

Depending on what you want to do with your lower back, it

probably is. But of course if your thing is power lifting for instance,

then obviously no, you have to do some, you have to do specific,

you got to do the sports specific activity.

Lawrence Neal: Sure. So I'm curious, let's move on to the lower back exercise

unless you've got anything else to say about the plank row. I think

you did a good job of describing it.

Bill DeSimone: No. This led in nicely.

Lawrence Neal: Yeah. So I remember you, I know you've got a video on YouTube

where you demonstrate a, I believe it's a lower back exercise, and

it's like a prone trunk extension except on a fitball.

Bill DeSimone: Yes. That's one of the congruent exercises, right.

Lawrence Neal: Yeah. So let's start there. Why did you decide to choose that for

lower back?

Bill DeSimone: Well, let's see. Actually, I'm not a tremendous fan of specific lower

back exercise. And part of that is my own experience. Whenever I've done a barbell dead lift or barbell squats for an extended time,

no matter how precise I wanted to be, at some point I would pull

something, "pull something in my back". So I've always been a little

bit reluctant to experiment too hard with that.

Bill DeSimone: And then in dealing with clients for 35 years, I wouldn't be

comfortable with a person saying, well I have some back pain. And

then saying, have you been to a doctor for it? Well it's not that bad.

And then giving them an exercise that specifically targets the lower

back. Because, like I think I said earlier, something like if somebody

reaches for something on the floor and "their back goes out", they

describe it as my back went out. But if you tell somebody lift this

weight, it's going to make your lower back strong and then their

back goes out, they look at you. You told me to do it. That's why my

back hurts. So I've been always very reluctant to give specific

weightlifting for people's "lower back".

Bill DeSimone:

So my approach, and again, part of this is skewed towards the general age of the clients I'm dealing with and my own age, I kind of rip off McGill's basic levels of back care, which is basically some cardio activity just to improve the circulation, especially as a warmup, some short range abdominal work, not necessarily heavy or, or "to failure", but more to mobilize or limber up the lower back, and then stretch the hamstrings and hip muscles. And part of it also is holding a good posture while you're doing weight training exercises.

Bill DeSimone:

So when I have somebody on a leg press, excuse me, let's say a chest press, their posture, how they're holding their lower back during the chest press is part of the exercise. And if they started arching or hunching over during the exercise and I correct them and no, you have to maintain the posture, and that's where it goes. Whether it's a machine exercise, a free weight exercise, a body weight exercise, holding your posture while you're doing the exercise is part of it. Definitely slows people down a bit. They're not like zooming to the top of the weight stack. But I think it's a practical way of treating lower back and preparing the lower back or the deep back, technically. Preparing the deep back for anything that might come up, or most things that come up in their daily life.

Lawrence Neal: Okay, cool. So why then this specific exercise with the fitball?

Bill DeSimone: Well, yes, technically it was over, was it over a ball or Bosu? I forget, which.

Lawrence Neal: I'm pretty sure it was a ball.

Bill DeSimone:

It might have been the ball. Might have been the ball. That was just to have something included for the lower back. So in that exercise, it starts with the knees bent and the hips bent, and the spine draped over the ball. And then you straighten the knees, the hips and the spine. And that becomes the exercise. Not overarching and not locking your knees and slouching over.

Bill DeSimone:

Because what you're really doing is you're holding ... the lumbar spine, it does allow some movement, right? You just don't want it to move so much that it reverses the curve. So this is a way of specifically addressing those muscles, but it's more of a control exercise than a strength exercise. Like I would never put a weight in their hands and have someone to do it. This is just so someone gets the idea of how to bring their body into the right posture. And I use the ball. In that case a Bosu is fine also because again, there's something for your body to drape over. I realize it's not full range. I realize it's not the MedX lumbar extension, nor is it the Cybex Isokinetic back device.

Bill DeSimone:

But when I'm dealing with people's backs, I'd rather err on the side of caution, and if they can do enough reps, enough reps that they feel the back muscles and they feel how to get in the right posture, I'm content with stopping it there. I don't have to try to have them set records using the lower back, just because again, given the age of most of the people I train, this is not an elbow. Whereas if something goes wrong in the curl, you hurt your elbow. If something goes wrong with their back, this is a major problem.

Lawrence Neal: So where were you ... if I follow this correctly, am I right in thinking

that you will rarely actually do a lower back exercise of a client? You

will, because they were doing so many, well it's likely they'll be

doing so many multi-joint exercises that the lower back's inevitably

going to be involved anyway.

Bill DeSimone: If you're holding, well, if you hold your posture while you're doing

the exercises, yes. And I realize that's a big if. I mean, there are

plenty, you see plenty of videos, not from me, of people doing curls

and they're arching their back or they're squatting too low, or

they're using a kettlebell and you see them losing their back

posture.

Bill DeSimone: You have to coach it. And again, what I'm coaching is the back

muscles holding the posture, not necessarily trying to lift greater

and greater weight with those same muscles.

Lawrence Neal: And this is good because not everyone has access to a MedX

lumber extension machine. So this is good to talk about. People

can relate to this if they don't have access to that. What about

things like, why not just a normal prone trunk extension without a

Bosu or fitball? Why not just ... is it just because it's easier to do

with that device?

Bill DeSimone: You mean face down on the floor like a back [crosstalk 00:21:57]?

Lawrence Neal: Yeah, like a ... so, I used to do Superman. Where you've got your

hands out in front of you and then you would ... yeah. What's your

view on that exercise?

Bill DeSimone:

Not terrible. Personally, no, personally I found when I got overenthusiastic and really arched to the, the most I could, the most extreme arch position, that every now and then it would go into spasm and then I'm lying on the floor gasping. But if you just hold back a little bit from arching, for instance, you don't want the facet joints in the spine to be what stops the motion. No, you don't want to arch as far as humanly possible. Your body allows that. But you don't want one bone hitting another bone to mark the end of the exercise.

Lawrence Neal:

Yeah. Makes sense.

Bill DeSimone:

If you can do the Superman and moderate it a bit, like give yourself a little bit of a ... well, here's the thing though; if you do enough repetitions, those muscles are going to fatigue and it's going to moderate for you. You're not going to come up as high. Hyperextension is an interesting thing whether you should be doing it or whether it's harmful. When we're talking about these types of exercises, whether it's over a Bosu, a ball, or just on the floor, the fatigue in the muscles themselves will probably keep you from overarching to where it's going to cause a problem.

Bill DeSimone:

Where hyperextension is really a problem is when you're pressing, or you're curling, or you're bench pressing, and your effort, your attention is elsewhere, and your back arches to try to help you lift a bigger weight. That's when you lose control of the hyperextension. And again, it may not be a stabbing acute injury, but you may be putting pressure on your discs. That's going to haunt you later. So

you know, the guy who was bench pressing on a machine or even on a bench and their back is arching to try and get that extra rep, or if they're overheaded pressing, and again, you know their back is arching because they've hit failure, the deltoids are done, but they're insistent on continuing to push, and so now your body is trying to arch the weight up. That kind of hyperextension is, I think, a little more of a concern than when you're doing the hyper, the back spine extension and you go up too far, for instance. Again, the second kind, the fatigue is going to take care of it and you are kind of aware of what you're doing, so you have a built in limiter. If you're trying to get 300 pounds off your throat and you're arching for dear life, now you're not paying attention to your back.

Lawrence Neal:

Yeah. That's a really good way of putting it. I'm embarrassed to say, I've never really thought about it like that. And I can completely see how if you're using some kind of load in a different exercise and hyper extending out of that can be really risky. I'm just curious on your thoughts on this. I did a podcast quite recently with James Fisher, and we were talking about his favorite exercises for all the different muscle groups. And we're talking about the lower back, and what he would do in a scenario where he wouldn't have access to a lumber extension machine, which he does have a MedX lumber extension in the university. And he was a fan of doing a torso side bend with plates.

Lawrence Neal:

And obviously when you're doing a standing side bend, you are using your abdominal musculature. But the way he described it to

me was that you're using your, is it your QL, your quadratus lumborum? LQ? I forgot-

Bill DeSimone:

Yeah.

Lawrence Neal:

And that he felt that that would then in turn recruit, you know, lumbar extensions and multifidi and other muscles in that area, and would be a potentially ineffective lower back exercise. Now I might not have quoted him perfectly there, but that was his take. What's your thoughts on that as an exercise, again for I guess lower back strength?

Bill DeSimone:

Well, you know, it is an interesting approach because side planks are like the, have been the a fad core exercise for 20 years now. And I've thought myself, yes, side bends, I mean if you don't like a side plank because of the pressure it puts on your shoulder or if it's simply by definition too hard for you, why wouldn't you do a side bend? As I'm flipping through my anatomy book here, yeah, the quadratus lumborum would be one of the muscles that helps bring you vertical, as well as other muscles, multifidus et cetera. So I think it certainly is a component of, it certainly a good way, an interesting way to approach it.

Bill DeSimone:

Plus it's a manageable thing, because you can, it's a manageable exercise because you look at yourself in the mirror and give yourself visual cues as to how far to dip down. You wouldn't try to go to the floor with it, I hope. But that's a very interesting take, and probably a good one. Like I said side planks are such a go-to exercise when people write or talk about the core. But I'm not a fan, especially with

the repaired shoulders. And so the side bend I think is a perfectly good a ... and plus a side bend is a lot more progressible, because you can, whatever your increments or your dumbbells are, you can progress with, whereas the side plank, if you can't do your body weight, you're out of luck.

Lawrence Neal:

Yeah, yeah. Good point. Yeah, it's a, it's a really interesting exercise. I start, well I was doing it, I've started this new program, which doesn't include it, but I'm certainly going to try doing them and include them in the future. And I found them to be very, very challenging, but in a good way, like challenging in that it just felt like it involved practically every muscle in your trunk. And so quite, but at the same time, you didn't feel, I didn't-

PART 4 OF 5 ENDS [01:56:04]

Lawrence Neal: But at the same time, you didn't feel, I didn't feel uncomfortable

doing it. It felt quite congruent, I think is the word I'm looking for, to

steal a word from you.

Bill DeSimone: Yeah.

Lawrence Neal: Yeah, and it just was incredibly challenging to do, and I didn't need

a lot of load for it to be effective, and relatively strong, at least for me, and so that was quite interesting. So yeah, I do encourage people to give that one a go. Maybe we can find some videos online

to better demonstrate that.

Bill DeSimone:

You know, what's interesting about the side bend, in Darden's early Nautilus books in the late seventies he included the side bend as a latissimus exercise, in the lat section. When you look at how the lats are attached, I kind of see what he was thinking, because the lats attach the upper arm to the middle to lower part of the spine going down to your tailbone. If I recall, in those books he had the unloaded arm was on top of the person's head and the dumbbell was in the other hand, and so it was to work the lats on the unloaded side.

Bill DeSimone:

I think he's gotten away from it, but it's certainly an interesting take. Once you get into the core muscles, it's not quite as clear what does what as a pectoral or a biceps for instance. There's a lot of ways to affect it and you just have to pick the one that gives you the right progression and allows you to start safely. You wouldn't want to go right to a side plank or some gymnastic stunt to work your core, because if you don't get it right, you're going to jeopardize your back.

Lawrence Neal:

Yeah, I think that's great advice and a great point to end on in terms of some thoughts about how to pick exercises. Bill, this has been a lot of fun. I want to talk before we wrap up, I do want to talk a little bit about what you've been up to and certain projects and things, but before we do that, what's the best way for people to find out more about you?

Bill DeSimone:

You know, lately I think that LinkedIn is the best place to connect. That seems to have a lot less clutter than Facebook.

Lawrence Neal: Less drama.

Bill DeSimone: And less drama, less clutter, less back and forth, but it's still seems

to be a good place to get contact information and to match up people with similar backgrounds. I've actually been using that a lot with the interns as far as teaching them how to assemble a resume, teaching them where the job opportunities are, or looking at people say who are in a line of work they're interested in, but with maybe say 10 or 15 years experience so they can see what those people

Lawrence Neal: I'm sure there'll be plenty of people listen to the show, owners of

HIT studios who would be very interested in taking on some of the interns you work with since they'll be getting tutelage from you. But

did to get where they are and they can get a path for themselves.

I'm assuming you already have many, many connections and those

individuals will get first dibs.

Bill DeSimone: Two of them already have. No names, but one in New York and one

in Philadelphia.

Lawrence Neal: Oh right, okay. I can guess, though. I could guess.

Bill DeSimone: Sure, sure.

Lawrence Neal: I won't, though. I won't. Okay, sorry, we'll put the link to your

LinkedIn there in the show notes, but is there any other ways that

you want people to contact you, website, or?

Bill DeSimone: Oh, well the website is very generic, optimalexciseni.com, and

that's really for people who are shopping and checking me out, so

it's kind of static. I don't really update that too much. I do update Facebook to a degree. I'll be doing a Kickstarter relatively soon, so I'm going to be a little more active on social media, putting material out to entice people to investigate the Kickstarter project, and that be the usual suspects. LinkedIn, the Facebook, against my better judgment, Instagram and maybe possibly Twitter. The other four places, I'm going to pretty much duplicate the information on all those different places.

Lawrence Neal:

Cool. Sounds good. Well, I'll make sure I get all of those links and put them in the show notes. People can check that out and follow you via those different platforms. Do you want to just talk about this Kickstarter project? Because it sounded really interesting and I wanted you to hold your thoughts on it and save them to now because I think the listeners might be interested in what you've got going there.

Bill DeSimone:

Yeah, thanks. Well, I had been working on this book Joint Friendly Fitness forever. Not really. And literally it's about 80% done, and since I'm not sure that I will have much to say after that, I had wanted to professionally produce it and promote it. But I know for instance to do the full promotional package on Amazon is probably about \$10,000, and to produce the book so that I'm not sitting there trying to wrestle with the resolution of photographs and margins and page numbering and such, that was going to cost some to have a professional do it. So I had the idea to do a crowd funding for it, but I was procrastinating because it ultimately felt a little

selfish, a little self-centered, even though I know that's kind of what Kickstarter is.

Bill DeSimone:

So I put that on the back burner, and then when I started working with the interns and we were doing Joint Friendly Fitness material and I realized I had some career advice to be able to give them and introductions to make, one of the feedbacks I kept getting from people like the aforementioned studio owners was, "Gee, it's too bad you can't make any money off the internship." The idea came up that, gee, why don't I just roll this all into one project and the Joint Friendly Fitness Project becomes the internship and the book so that I can spend one-to-one time with the interns? An internship where the person just observes is only so useful, but if I'm spending hours training the people and letting them practice training on me, and breaking down information and making introductions, that's a useful internship.

Bill DeSimone:

I became a little more comfortable with crowdfunding that as a project, and then the last piece of it was a newsletter, because I thought, well somebody who's interested in the Joint Friendly Fitness material and thinks helping interns get jobs is worthwhile, they might participate, but if they're into both of those things they might want to know on a regular basis what the interns are doing. The idea of a newsletter came up, and so weekly for the length of the internship, basically somebody who backs the project will be able to follow the materials the interns are following for the length of the internship.

Bill DeSimone:

That newsletter will have, again, what we went over specifically with the interns. It'll have new video as I re-video the Congruent Exercise stuff as a way of teaching the interns, we'll record that. The newsletter will be a preview of Joint Friendly Fitness, preview pages of that. And then I'll probably get in the habit of doing an essay on whatever topic strikes my fancy that week.

Lawrence Neal:

Awesome.

Bill DeSimone:

The Joint Friendly Fitness Project becomes more than just a book. It becomes the internship, the newsletter, and then the book becomes a permanent record of the internship and the newsletter, and that I said, okay, that I'm comfortable putting out. This way the person who's backing it isn't just getting a coffee mug and a t-shirt or a hat, you know, another piece to gather dust in their house. If they're into the final material, if they're into the postings I've done over the years, they would probably be interested in the newsletter and in seeing new people in the field get introduced to this material as opposed to trying to sort out Instagram for what they're going to do with their clients.

Lawrence Neal:

Yeah, totally. I think this is a great idea. I'm interested in taking a look myself. Is the page up currently, or is that soon? You said a couple of days, did you?

Bill DeSimone:

Currently, no, but it will definitely be within the next couple of weeks.

Lawrence Neal:

Okay, so we'll definitely have the link. When it's ready, just send the link over to me and I'll get it in the show notes so that people can check that out and decide if they want to participate. But you know, Bill, I think there's plenty of us who have been waiting for your book and absolutely devour anything you put out there. I'm sure you won't struggle in finding people to support your cause. The Hill Fit guys are awaiting desperately your work.

Lawrence Neal:

I'm excited. I've been looking forward to your next book for a while, and I think, because I remember you saying that you thought this was perhaps going to be an even simpler version of Congruent Exercise, and obviously an evolution of that in terms of how you look at certain exercises now, with Moment Arm Exercise being perhaps the more technical version. For me, I was getting excited about the simplicity that I might see, and that I'd actually be able to understand it a little bit better.

Bill DeSimone:

Well, you know, that is a battle and that's where the interns came in handy, because I had to express things to them. Like for instance, if I talk to Adam Zickerman or Roger Schwab or Fred Fornicola, guys around my age with about my level of experience, there's a shorthand you take when you're talking about stuff because we know what the other guy has read. We've all read the same stuff, or crossed paths with similar people.

Bill DeSimone:

Then when you go to write, you end up writing to guys who have 40 years experience, which by definition you lose everybody else. So working with the interns where I had to say, "Oh, wait a minute, this

person, if I say Mike Mentzer, this person looks at it and has no idea what I'm talking about." You have to put yourself in somebody else's shoes who's not as experienced as you. That's a huge help in expressing this stuff hopefully in a way that's useful to people.

Lawrence Neal: And also, I just thought we'd mention you not too long ago now did

your course with HITuni and Simon Shawcross.

Bill DeSimone: Yes, with Simon, last year. Yeah, last summer's project.

Lawrence Neal: Yeah, on functional training, which knowing you and knowing Simon

and the quality of the stuff at HITuni, I imagine it's a very good

course. So did you want to give an intro on that quickly?

Bill DeSimone: You know, first of all the title was deliberately provocative, but there

is some, it was deliberately provocative, but there is some useful material under the broad umbrella, so-called functional training. The question is sorting out what's real and what's useful from what's a stunt. If you can take what's real and what's useful, you can easily incorporate it in a 20 or 30 minute workout, and so if the person, if the clients are getting stale or if the client has a specific weakness that one of these things can address, you can easily incorporate it

into the brief, short workout framework.

Bill DeSimone: But one of the things we did there, and Simon and Joanna did a

great job with the video, is for each exercise I demonstrated

"wrong", like doing the exercise with a lot of instability, and " right",

with a lot of stability. What they did that's so great is they put it on a

split screen. For instance, if you see how to do the exercise wrong

and then next you see how to do the exercise right, you have to try to remember what wrong looked like in order to distinguish it from what right looked like. But what they did was they showed that and then they put them on a split screen so you could see the difference side by side. That piece right there to me makes a huge improvement in making the material clear.

Bill DeSimone:

We went through upper body, lower body, core exercises, we went through, explained about stabilization and how to spot it, how to coach it. We went through how to apply it, we went through some sample routines. I put Simon through a workout and he also, I believe he still is offering a free PDF of Congruence Exercise Plus to people who buy the course.

Lawrence Neal: C

Okay, cool.

Bill DeSimone:

I also think, and you might want to check with him, I think they were preparing some of those clips to put on Instagram because this way people could see what was in the course and not just have us tell them, you know, instead of me telling people or him telling people how good the course is, by seeing an individual clip and seeing that side by side, seeing the difference between form discrepancy and good form, I think that makes a huge difference in the understanding. No cheesy Instagram videos for us, we just put real material out.

Lawrence Neal:

Yeah, no, that's awesome. I will see if he's done that, and again link that up in the show notes. But yeah, and also if you use HIB 10, I believe you'll get 10% off any <u>HITuni course</u>. That includes Bill's or

any other courses that you might be interested in. So yeah, further incentive there, and a big supporter of obviously what you do and what Simon does, and hopefully I can help make you guys more successful, which would be pretty cool.

Bill DeSimone:

You know, I think I said in the introduction of something I wrote for Simon, and this is confirmed by working with the interns, that there's no real formal source for learning how to train this way other than what Simon's doing.

Lawrence Neal:

Yeah, nailed it.

Bill DeSimone:

The interns academically had no idea what Nautilus style training was, or even just training strictly, much less high intensity. Obviously elsewhere online, Instagram, YouTube, et cetera, there's just such an overwhelming amount of clutter that unless you are already into HIT, you can't find HIT material. The print magazines, you know, forget that. I mean Men's Health, Muscle and Fitness, whatever that stuff is that, you'll never find deliberate slow training in those things. Simon's material, that's the place to go for it right now.

Lawrence Neal:

He's done such a good job. He's very clever because, yes, you can find HIT guidance in ebook form, you can find it. There are some good YouTube channels out there, some people that have been on this show, but nothing that's as detailed and as comprehensive as HITuni. I think Simon and Joanna have been very clever because they've really dominated that category. I don't know if you're familiar with 22 Immutable Laws of Marketing, but one of the laws in there is

if you can be first into a category, and that can be a very niche category, and you do it very well, then that is a very powerful marketing tactic because there's nothing, there's no competition. I really don't think that, I mean I hear about, I know of HIT businesses that have their own certification programs, but from what I understand, most of them don't provide them to the public.

Lawrence Neal:

I also hear about others who want to launch something, and I always say to them, "You do realize that HITuni has something pretty amazing? And unless you're going to use something very different, I think you might be wasting a bit of time there." Because I'm also not a big fan of, for instance myself, I don't like creating things I think are already available, because I don't think that's that helpful. Unless you're creating something that's very much better, not just incrementally better but a big innovation of what already exists, if that makes sense.

Bill DeSimone:

That's why I don't regurgitate Nautilus Workout Bulletin One or Darden's books when I write stuff.

Lawrence Neal:

Right, right.

Bill DeSimone:

It's already there.

Lawrence Neal:

Yeah, yeah, yeah.

Bill DeSimone:

It's already there. Why should I repeat the same thing? I've got to introduce something new. That's why it takes me so long to the write stuff, because if I can't come up with a better way of expressing it, or come up with something unique, then why?

Lawrence Neal: Yes. Yeah, exactly. I mean, it's harder for you to market it and it's

less useful.

Bill DeSimone: Yeah. You know, years ago in Manhattan I saw a beer advertisement

and it turned out it was for Grolsch beer, and I don't think they use

this campaign anymore, but the sign said 'Mastery, not mimicry',

and I have that up in my studio just as a reminder not to just reword

other people's stuff. Come up with something thorough that's

unique. I'd rather be a master of that and really be able to get these

points across than just rewrite something else that already exists

just for the sake of having something else on the market.

Lawrence Neal:

Yeah. I mean, come to think of it, you've follow this strategy perfectly. Even for myself, I get a lot of people say to me, "Oh, you could create a course or an ebook or whatever, and you could obtain the permission of guests or create something based on what you've learned." I just think to myself, I mean, some people might call this a limiting belief, but it's more of an ethical thing for me. If it already exists, like we've been talking about, if it's already Body By Science, how could I possibly create anything that even comes close?

Lawrence Neal:

It's just a waste of effort. I'm much better off, and it's much more valuable to others if I create something new, and that's what I did with the HIT Business Membership, is provide a resource to help specifically the HIT business owner grow their business, not just the generic health and fitness gym owner, which was the impetus behind that.

Lawrence Neal: I did a while ago, I did actually reach out to you and people on the

podcast and ask permission to sell an ebook of transcripts, which I did do for a little while. But you know, I found it made more sense to just give that away, and certainly these days it's difficult to, you know, most people give things like transcripts away. I think you

could potentially justify selling something like that, but it's more

useful to me as a way of helping get people's email addresses, as

an incentive for that.

Bill DeSimone: Right, because you're going to sell it one time and then it's going to

get copied and distributed anyway.

Lawrence Neal: Yeah, right.

Bill DeSimone: That's like the helpful advice, "Oh, why don't you put a DVD

together?" Why? Especially now, now that DVDs are, you know,

everything is streaming.

Lawrence Neal: The thing is though, you think that will hurt your sales, don't you? I

think I would challenge you on that, because for instance-

Bill DeSimone: What was that?

Lawrence Neal: Well, you think people will, this is interesting talking about this for a

moment. I won't keep you too long, Bill, because I know we should probably wrap up, but it seems to be quite a prevalent mindset in

HIT, which is people don't want to create things like books and

courses and things because they think that people will just copy

them, like you were going to say there, and rip them of. For

instance, if you sell, let's take an example, like a PDF ebook, you

created that, sold that through your website, someone could just take that and then make a load of copies and share them with their friends, right?

Bill DeSimone:

Well, actually I take that into consideration. Whenever I put something out as a PDF, and I don't usually sell it, the first page is, "Here's where you find other stuff I've done." So I hope they're doing that.

Lawrence Neal:

Right. Yeah, exactly. Exactly.

Bill DeSimone:

If I'm giving away a PDF, the first page of it is where to find me for whatever, consulting, training, other books. Actually, I think my real objection is the upfront costs of generating say a DVD or a professionally produced book that you're not going to recoup. I don't really have a problem with making Congruent Exercise available, for instance as a reward for the Kickstarter as a PDF, because it's been selling for a while. It's out there, it's run its course somewhat, so I'm happy to use it to draw attention to new stuff.

Bill DeSimone:

But the new book, frankly, it's going to be a while before I put that in electronic form because it is going to involve a little bit more cost to pay someone else to format it and get a photographer and manipulate the photos the right way. Even then, at some point the book exists to establish your credentials and it comes back to you in training or speaking, or whatever. You definitely have to have a flexible mindset as to how far your ownership of this type of work goes.

Lawrence Neal:

One thing I would definitely recommend you do, and this will be my only advice to you, if you haven't already thought about this, is make sure that in your book you put your web domain that you want to send them to. If it's your personal training website, and try and capture email addresses of your readers, because it will just make your life so much easier over the longterm when you launch anything new, because you'll start building an email subscription base. I know someone, my business coach has written a book and he helps people build online businesses, like me. His book, whilst it's made him a fair amount of money, I don't think many people get rich selling books these days, but it's been incredibly valuable as a lead gen thing for him. So for you, I think that'd be really cool. Would be really effective.

Bill DeSimone:

Yeah, you have to take a little different attitude towards it. You know, it's not like 30 years ago where the book was the final product and it had to sink or swim.

Lawrence Neal:

Right, yeah, yeah. Like you say, it can be very effective leverage for consulting and speaking and things like that, and that's how obviously a lot of these authors make a living now.

Bill DeSimone:

Yes, without going the route of paying to be included in the type of book that manipulates exactly that. Which I've had a couple of clients say, "Oh, here's my book," and I look at it and it's, I don't know, celebritypress.com or something, and they have a name author and they pay writers and they include these sub-writers in the book and it finds the Amazon category with the least amount of

competition, and then it becomes an Amazon bestseller. It's not a real book, it's not real content. It's a physical book, but it's not real content.

Lawrence Neal: Yeah.

Bill DeSimone: I have to put the blinders on so I'm just putting out the content, and

then I'll worry about all the extra stuff later.

Lawrence Neal: Yeah, absolutely. Yeah, cool. Well look, I'm excited, and keep us

posted with how that goes and obviously when it's available and we'll make sure that the blog post is updated, and maybe we'll do a

part two podcast to cover some of that when the is launched, for

instance.

Lawrence Neal: For everyone listening, to find the blog post for this episode, please

go to highintensitybusiness.com/billdesimone, all one word. That's

Bill, and then D-E Simone, with an E on the end, or Simon with an E

on the end. For all episodes, please go to highintensity business.com/podcast. Until next time, thank you very

much for listening.

Need help to grow your HIT Business fast? Join HIT Business Membership