DANNY LENNON: Jordon, thank you so much for joining me on the podcast today.

JORDAN Feigenbaum: Thanks for having me today, I appreciate it.

DANNY LENNON: Yeah, I am excited to get into some of the topics that we are going to discuss today. And maybe just before we get into the real interesting stuff, just if there's any listeners out there who are maybe unfamiliar of your work, what's the best way to introduce them to you, a bit about what you are doing now and then maybe any relevant stuff from your background that might give them some context for where we are going to approach some of these topics today.

JORDAN Feigenbaum: Yeah. So I am Jordan Feigenbaum. I am the owner of Barbell Medicine, that's my company, I am a physician, I have a medical degree, I have a masters in anatomy and physiology. I've been coaching both in person and online for a little over 10 years now. I am a competitive powerlifter. I know you guys can't see this but I am saying this with air quotes because it just depends on who shows up, but at one point, I think back in 2014-2015, I actually was in the top 20 for all the All-Time Raw totals at 198. So at one point I was reasonably competitive but I think we get more and more – stronger and stronger people show up, so I got booted off the list. But yeah, for all my stuff, barbellmedicine.com is where we post all of our info.

We got a YouTube channel under Barbell Medicine and Instagram of course, jordon_barbellmedicine.

Latest project, it's probably actually important is this up-to-date articles, so up-to-date is like the doctors' Google. So effectively anytime you go and see a doctor, particularly in North America about any issue, they are going to go to this resource up-to-date and just type it in there just to see – to make sure that they are keeping up with the literature and the latest recommendations and guidelines. So they basically approached us or me rather and were like, hey, do you want to write the article about strength training and health. I was like, yeah, but let me grab a few of my friends first. So 20,000 plus words later we submitted our initial draft. We keep revising, it's going to be cool though. It's like literally going through what does the evidence suggest about resistance training on all these different health outcomes from the standard stuff like obesity, hypertension, elevated cholesterol, all the way to more obscure things like multiple sclerosis or other autoimmune diseases or post-heart attack, all this weird stuff that people are effected by which I also always find interesting. Like, I am not your doctor but you are asking me for very high level medical advice which is – it's a cool place to be. But anyway that's probably the biggest project so we will keep everyone posted on that. And now after the longest introduction that you've ever heard, we can talk about important stuff I guess.

DANNY LENNON: No, that's awesome, because I think it actually touches on something that was going to open up much of this conversation on – particularly given your background I think you are kind of in a unique position having this one foot involved in strength sport, being able to advice people on say nutrition and training for getting stronger, building more muscle, but at the same time being within the medical community as a medical doctor. It's quite a unique position to be able to touch on some of these concepts, so I definitely have a lot of questions I want to ask. But just before that, just purely out of curiosity, what does a typical day look for you right now in terms of the work you are doing with either patients and managing the stuff you are doing with all these various different projects going on?

JORDAN Feigenbaum: Yeah, that's a good question. Well, recently I was travelling, we spent three weeks in the South Pacific doing the New Zealand, Australia thing, which was cool, or as the local say, "'Straya". So that was an abnormal period of time but normally I wake up pretty early, nothing obscene but yeah usually 6-6:30 and start my day. Most of my day is filled with answering emails or creating content, so writing, editing video now, the media has really taken off or podcast or something. I see patients remotely via telemedicine, through a company called SteadyMD. They are really pioneers in the field, trying to connect physicians with patients for primary care, especially doing that remotely.

Telemedicine has been around actually for a long time, and a lot of state legislature over the past 10-15 years has kind of allowed this to be more accessible but it really hasn't been taken off in the primary care role, and I think a lot of that is due to people not necessarily having a primary care doctor they see regularly until something goes wrong. And then also because nobody was really marketing it to people who have special needs. And I don't mean special needs in the classical sense; I just mean if you are a lifter for instance – there's a great example, this happened just this morning – if you are a lifter, hard-training athlete otherwise, and you go to your doctor and they run a standard CAM panel, so just either a complete metabolic panel which gives you liver enzymes in addition to all your electrolytes, your AST and ALT, which are mitochondrial enzymes are very likely to come back elevated, anywhere between 1 to 3 times the upper limit of normal. This has been well studied, well documented, although you are not going to find many primary care physicians who are aware of this.

But in any event, these enzymes come back high, and automatically your primary care doc is likely to think, oh gosh, you have Hepatitis or you have invading malignancy or you have something obstructing your bowel like gallstones or common bile duct obstruction otherwise. So something serious rather than, oh wait, you actually have trained in the last seven days and these enzymes are elevated, which subsequently makes that person go through additional testing,

unnecessarily so, that's a lot of healthcare resources by the way. And, oh by the way, stop lifting. That's like the standard – and stop taking any supplements because it's probably the way protein or the creatine mind you that neither of them are really metabolized in the liver to any sort of deleterious effect.

So, anyway, yeah so I see patients for a few hours as needed, and then train my face off for a few hours and then come back and try to do some reading. I try to block off, that's probably the most consistent thing that I'd do is block off time to read every day. If I don't do that, I start feeling really dumb n like I am decaying. So that's the – well, everybody's got the routine right. That's just my thing. So, I get those text messages that are just question marks and people are like, what are you doing; I am like, reading. So anyway...

DANNY LENNON: Excellent. You actually touched on a couple of things that I think are going to be relevant to some of the following questions. Right from the outset, you've obviously mentioned this piece you've been working on in terms of strength and how that relates to health or more so resistance training and health. But obviously there's parameters that are related to strength training that we've seen a lot of research point to, and that has been mentioned on this podcast by many others before around how just when you look at overall mortality and health throughout the end of or towards the later years of people's lives. You see all sorts of interesting findings when you compare different populations based on strength status, on how much muscle mass they have and so on, but at least from what it seems that's been kept within certain specific research fields, similar with things like exercise oncology. We were only talking about recently on the show where you have this niche within research now where lots of interesting things are coming up but maybe not as widespread in practice. So just before we delve into any of that, what is the best place to start on this Jordan when we are thinking about currently where things stand on addressing this issue of resistance training, gaining strength, they are all muscle mass, all these things how they interlink within health and maybe how that

compares to previously or where that's conventionally fallen when it comes to medicine?

JORDAN Feigenbaum: Well, I think you summarized it quite nicely that a lot of evidence and not only like hard evidence, like people actually have been doing studies with large sample sizes but also editorials and commentaries and professional panels' opinion, position statements have been put out suggesting that resistance training can do a whole lot of good for people including yes lowering mortality, lowering morbidity of disease states, improving survival rates and quality of life and literally you just want to go down the list and it's there. So the real question is, why isn't this being practiced at a larger or being disseminated on a larger scale. And so to me, this comes down to just kind of like interdisciplinary education. So right now, in the United States, because that is where I am most familiar with, this kind of thing, so less than 10% of all primary care physicians even know what the current exercise recommendations are.

Current exercise recommendations were originally doled out in 2008, it was a joint commission with like the World Health Organization, Institute of Medicine, ACSM, handful of other freshmen groups got together, sat in a room and I guess came up with these things. Anyway, they are called the physical activity guidelines for adults, came out in 2008, and actually recommended resistance training. So that was in there, twice per week, like hard resistance training, and you could do on top of that four days of either moderate cardio or two days of vigorous intensity cardio. So it's like, okay, those are the standard recommendations that all adults should be given. That's 2008, and as of 2014, yeah, less than 10% of all primary care physicians even knew it, knew that like that existed. And less than half of them who did know that it existed would be okay recommending them. So, yeah, it sounds pretty bleak, but ultimately I feel like if I am here for a purpose it's to fix that. That's my jam.

The studies that look at that like why both the rate and the why behind why aren't physicians up on this and why aren't they recommending it, they cite all sorts of reasons. One, they don't have enough time to make these exercise recommendations in general.

Two, they don't exercise themselves so they don't really feel comfortable doing it. If they decided that they were overweight themselves, they felt like they couldn't recommend these things. Yeah, and then just lack of knowledge.

So, I mean, there was even a study where they pulled internal medicine residence at a very prestigious academic institution that will go unnamed for this podcast. They basically asked them like, "Hey what do you feel like you have a decent grasp on nutrition?" And the average answer was, "not really," which was later confirmed by another question where they asked them, "Hey, what are the calorie equivalents for 1 gm of protein, 1 gram of carbohydrate, 1 gm of fat, 449?" And over half of them got the question wrong, which is incredible because even if you are not like a nutrition person, like that's not your jam, you still need to know that stuff as a physician for like, especially as an internal medicine, somebody's been working in a hospital or theoretically you should be qualified to work in a hospital for calculating like total parental nutrition or calorie requirements for a patient in the ICU or after a burn or something like that. Like, you just need to be up on stuff. So anyway that's funny.

So yeah, the state of interdisciplinary education I think is low and I think that's starts at a medical school level. There's no exercise, sort of initiative or education outside of like using exercise in a thought experiment in like your basic physiology course for oxygen dissociation curves or something like that or how the body regulates ph. So I think that we should start there. And then honestly, the ACSM is under powered. There's the ACSM, the American College of Sports Medicine is probably not well-funded enough to disseminate this information. They had this whole program called 'Exercise is Medicine' and I just don't think it's getting out to people, and my gestalt is that it's just due to funding. And this is me not even really liking the ACSM. We are not friends. I've got some issues with them, but I feel like if I want to get out to millions of people, the fact there should be resistance training as a part of other lifestyle changes to improve your health and prevent serious disease, then we are going to need a big organization like the ACSM behind

it. So I don't know if it's funding, but that would be my initial thought to kind of bridge this gap.

So instead, I've been making breakfast in the morning on Instagram without my shirt on, trying to attract a bunch of viewers, and talking about exercise, which has been working I guess. But...

DANNY LENNON: That's the way to go.

JORDAN Feigenbaum: That's kind of a running joke. You know what we really need. We really need like one of these Instagram fitness accounts with millions of followers, instead of talking about what is the best butt exercise, to just do like a weekly series of infographics and to reach the masses about what they should actually be doing training wise. They probably lose most followers but maybe they could just tell them, hey, we will go back to the butt shots next week but this week let's do something important.

DANNY LENNON: Yeah, an interruption to your usual programming, which is an important message. How about your health? Yeah, so there's a lot within that and like you say, it becomes, I suppose, understandable to some degree of why maybe this is not more a prevailing message for most of the general population seeing that they are maybe not going to get this information because one part of that equation you mentioned a lot of physicians and doctors just aren't aware of the current recommendations to be able to give them out. And then the other part of that, of those who do, many are maybe uncomfortable doing so for a variety of different reasons. I am just wondering, is part of that and this maybe off base altogether, but what sort of, I suppose recommendations are in place for doctors to give this information or how do they go about doing that? Within these guidelines, are they just able to say, you should be resistance training, how do they refer people out, where is their scope to be able to actually give specifics and so on and refer people to – is there anything in line there?

JORDAN Feigenbaum: Yeah. So in the United States, if you are a caring MD or DO or actually a handful of other professional degrees, like if you are a podiatrist or something – in any event, you can effectively – you have no limits

with your nutritional discussion whether that's right or wrong, that's just the state of the union there. Yeah, so, if there are some states that regulate or try to regulate what people can discuss about nutrition, who have no qualifications, if you are not RD, and in some states if you start putting out a bunch of nutritional information, that's potentially against the law. Whereas other states are like yellow, do whatever you want. But if you have an MD or DO, if you are a doctor, you can do whatever you want. Again, right or wrong, there are no limits, similar to masterpiece hit 90s' album on the no limit record label.

But from an exercise standpoint, yeah, there are again no regulations there either, which I think is good on the one hand because who would be deciding who gets to dole out exercise recommendations – it's going to be the government and it's going to be some PT who may or may not be qualified to make these important decisions. So, ultimately, I don't think it needs to be regulated. The reason why I am so critical of my colleagues in this situation is that legitimately if you type in 'exercise is medicine' or you go to ACSM's website – so if you Googled like 'exercise medicine' which seems like a reasonable Google search, you will come across the Exercise is Medicine website and there are free pamphlets just out the wazoo. And you can register for free to get all this material sent to your office. Even if at the end of the 10-minute visit that's rushed, because you have to see 25 patients a day to keep the lights on and afford your boat, you can hand them a pamphlet which I think is not optimal from like a compliance and efficacy standpoint but to me that feels like we would be doing a little bit better than, "Hey, just walk more," which is both – it's incomplete and incorrect, unless the patient has COPD for instance, in which case, maybe that is a stressful enough event to qualify as moderate intensity cardio.

So yeah, I don't know, there are free materials, people aren't using them. And then I think if you have to see 20 plus patients a day, what are you going to do? Somebody is coming in, even if they just want to refill and you are going to ask them about some chronic medical conditions or otherwise fill the preventive medicine requirements set forth by the government to

get your Medicaid or Medicare reimbursement or other insurance reimbursement, now you got 30-45 seconds left at the end of the visit to talk about training. And this assumes you know what you should be asking for, what you should be doing, which is not the case.

So that's one of the reasons I started doing telemedicine, so I could just spend an hour with my patients if I want or more. We get to talk about – probably half of my patients are like into training, so we get to cut through all the BS and just talk about their life for instance. But the other half is like yeah, I haven't exercised ever and I am like, okay, so you need to join a gym. And we look up gyms together, and then, here's what I want you to do, and they are going and they are like, you want me to put a bar on my back. I am like, well, yeah, that's where it's going to go. And then we talk about how to do the exercise.

I have had people do you know coach people on body weight squats and how it's going to be different under the bar like via telemedicine. Now it's not optimal. I would love to have them in the office. I was doing that in residency too, teaching people how to squat. They would come in and say they had knee pain and I would teach them how to squat. To you and I, this isn't revolutionary, right. I mean, how many people have you taught to squat in your life? It's just so many, so many I am sure. But for your doctor to teach you how to do that, I mean, that's – I guess you are right, I guess that is kind of a unique thing, but I don't want it to be that way. I mean the goal isn't just having myself and the other people associated with Barbell Medicine be the only people doing this. The goal is to have thousands of us and I don't want to charge people a premium to do that. People were asking me, they were like, are you going to – when you guys set up your clinic, do real time clinic or even if you just do only telemedicine are you just going to franchise it out. Absolutely not. The idea is to suss out this business model until it's perfect and then release it open source for free, because I want people to go into primary care and do this stuff. That way there's more of us.

So I think another thing that we can do as part of this sort of like doctor development course, is to cut that

learning curve off, so that doctors do feel comfortable referring to people. They do know what makes somebody a quality coach and not in general and sort of an easier referral system. I think it would be unlikely that we could get a bunch of doctors who are really good strength coaches too, like having them develop that skill set. But if we can teach them how to counsel patients on exercise, so that they do it, what's the appropriate follow-up and how to refer appropriately, that would be huge, that would be – I mean, even to increase that rate from less than 10% of doctors, even knowing these recommendations exist and less than half of those to that 10%, like doling them out, if we could double that, that would be a huge win. But I am a pie in the sky kind of guy so I just dreamed it.

DANNY LENNON: Yeah. I mean, the cool thing about that is that like you say, even doubling that rate is obviously a huge difference, but that's going to have more than double the knock-on effect in terms of people affected when you consider double that amount of doctors but then the referral network that they are going to have and so on is pretty huge. One thing that's kind of been popping up in my mind is I am just interested to hear thoughts on is I think a lot of times within health or fitness and when we are trying to give general recommendations to say the general population who maybe not interested in training right now, but just how to be healthier, I think sometimes we might err on the side of being too broad to try and make it as simple as a way to get healthy. So as an example, when it comes to exercise – and I've certainly said this to people in the past, if people aren't doing anything and they are completely sedentary, just start doing any form of exercise that you like, just start doing something and it's going to be better for you. But when it comes to resistance training as you alluded to many times, there is something that's – I don't want to say unique, but in many ways unique to how it's going to affect someone particularly if they do have a health issue. Do you feel that we need to, I suppose, be more true to that of while we know that resistance training has this unique benefit, being able to be strong enough to give that message to that people you actually should be doing this? It's not so much that all

exercise is going to be equal, if that question makes any sense.

JORDAN Feigenbaum: Yeah, I mean, I think the general recommendations of just do something, start today and go, I have no real beef with that, because yes being active over being sedentary is a win. My conjecture and my sort of – it's an incomplete response, it's not specific enough to tell somebody exactly what they need to be doing or even give them idea really. And it leaves way too much room for people to do stuff that's not very useful to them. And I think if we are in agreement that compliance with the exercise and/or nutrition protocol is like the number one correlate to success, however you are going to measure that, then if you are invested enough to tell somebody, give somebody advice or be in a position of power where you should be telling somebody, giving somebody advice, then you have to be specific enough to make the advice meaningful. I mean, I can't just give somebody a medication and say, yeah, just take it and that's better than not taking it. I have to tell them, here's a specific dose, here's how long you are going to take it for, here's how we know that it's working, here's how we know that you are having a terrible reaction to it, we need to stop and you need to go to a hospital or whatever. Like, you have to give out specific recommendations that are meaningful.

Now, it doesn't mean that we need to quibble over, well are five reps better than six, we don't need to quibble over that in the general population, but the recommendations need to be specific enough to be meaningful. And that's kind of my rule of thumb, so if you – when I was talking to my co-residents and now colleagues on the stuff, they are like, well, how specific should you get. And basically if someone's never exercised before, I think that you really have to spell it out for them like I want you to do exactly this and to start. Otherwise, they are either not going to do it or they are going to do it wrong, and it's going to be less effective.

So yeah, I think in much the same way that you could tell if somebody asked you Danny I want to lose weight, and you say yeah just eat less, which has the benefit of being true but it's just not specific enough to

really help. So that's the just walk more of the nutritional world. And while maybe my overall goal is to say change the just walk more to just squat more, I still think that the recommendations need to be specific enough to be effective.

DANNY LENNON: Obviously, we've talked about how strength training can affect health and that message has been maybe as widespread through medicine as it probably should be. And based on your experience as both an athlete and a coach within the strength world, and then having the side within medicine, and especially now when you are doing the work online, with these clients, is there any other examples where you feel your current stance on things is perhaps very different to that, that maybe promoted within medical school or just currently what's being done in general, not by everyone but in general across the board that is different to what you would do in a one-to-one situation with either a patient or client based on your reading of the literature and what you found in practice?

JORDAN Feigenbaum: Yeah, I think probably the most obvious one is injury musculoskeletal injury stuff. So if you have knee pain or low back pain or whatever pain that ails you, then you go into the doctor's office and he or she asks you what were you doing and you say, I was dead lifting 700 pounds and my back hurts now. The response is, oh well, you should never do that. That's bad for your back, which in that statement, in and of itself, from a person who you give authority is a nocebo. That's bad. That is bad that they say that. Not only is it untrue but it's harmful to the patient, because you've just set negative expectations in their brain about every time they deadlift, it's bad for them, and you are in a position of power, so you should know better. So I am a little passionate about that.

So the general advice and the general practice when you go in with a musculoskeletal injury to the doctor – barring that if there's no trauma and there's no indication for imaging, like x-rays, CT, MRI whatever, or you do have the imaging and there's nothing significant on there that would cause the pain – is to refer the patient to physical therapy and/or just tell them to rest it for a little bit, which is the exact

opposite of what I would do. I would not refer to physical therapy, not because I think that physical activity is unlikely to help, but rather that most physical therapists are not up on the pain science stuff and don't know how to train.

There are physical therapists who do know the stuff, but they are so few that I can't reliably say that I can just refer to any PT. Rather, they are going to have them do stuff with Thera bands or single leg stuff or nocebo them as well or yeah, we will put the stem on your back and then we will ice it and then we will put some heat on there and then we will do some gentle cat camels, and you will be fine. And my management on the other hand is, we need to do movement ASAP to get you to stop fearing the movement which is the main reason why they have a movement disorder. They feel like, oh I can't bend over and tie my shoes or I can't deadlift because I can't get on the ground. It's like, well, you are afraid of this movement right now, so we need to do anything to get you to move. So if that's bodyweight, squats or air deadlifts with the broomstick to get over that fear and keep moving, then we will do that. If we need a deadlift with the bar above your knees, we will start there.

So my recommendations for musculoskeletal injuries are much, much different than my colleagues, much different than the standard of practice, mainly because I am aware that it's extremely unlikely that the person is going to hurt themselves further with the non-specific low back pain for instance. It's very unlikely they are going to hurt themselves more. It's more likely that period of not training is going to make their condition worse. And I know that if I tell them to either stop lifting or deadlifts are bad or that they should just stretch, that none of that stuff makes sense empirically and it's not evidence based anyway. So maybe one day my colleagues will catch up on this, but until then we will just be shouting at the top of our lungs, that you shouldn't tell people that an exercise is bad or that it's harmful or that they need to stretch, which just as an aside, the stretching thing never made sense to me.

So you hurt yourself, you are suggesting then there's a tissue injury, which just as an another aside to this

aside, like evidence of like a mechanical damage causing pain and being correlated pain is not necessarily very tight. So that's the aside to this aside. But in any event, you are under the assumption that you have an injury to injured tissue. And now you are going to stretch it, you are going to apply distress to the damaged tissue that you are trying to get to heal. It doesn't make sense to me. Like, I tore my hip flexor – okay, that's unlikely, just again as a general rule – but now you are going to stretch it instead of letting it heal. It doesn't make sense to me. But I suppose, there's a huge market for selling stretching. I should have gotten into that market.

DANNY LENNON: Yeah, for sure. I think, tradition affects most of these things more than actual logic.

JORDAN Feigenbaum: Oh yeah.

DANNY LENNON: And particularly with the pain science stuff, it's interesting to me, who is someone who came from outside of the world of physical therapy and is being trying to learn from people who I see as evidence based practitioners who are doing good work and particularly as you mentioned if they have experience with athletes in sports advising, then all the better. And just from some of the things that you pick up from here, it's kind of mind-blowing for people to hear that stuff because of how prevalent these opposite messages are. So even a couple of the things you mentioned there of how pain doesn't necessarily and most of the time actually doesn't tell you there's actually a structural damage to the tissue, and vice versa that the structural damage to the tissue doesn't necessarily mean pain, that for a lot of people in and of itself is hard to put their head around because of how prevalent these things are. Oh you are feeling pain, there's a damage to this part of your body. And trying to get people past that to think actually maybe it's just your brain telling you something, is a big light bulb moment I guess.

JORDAN Feigenbaum: Well, I am glad you agree with me. Otherwise, we are going to have to argue for a long time and I just feel like, we could run out of time.

DANNY LENNON: No disagreements here, yeah. I think that's a super important topic and probably something we could spend a long time getting to. One other thing that I wanted to get to before we finish Jordan was as long time listeners of this show are fully aware, we are pretty big on preaching evidence based practice as the best foundation. Yeah, thankfully within fitness and health and nutrition, it seems to be growing, this kind of community of evidence based practice, but with that fortunately came I suppose this bandwagon buzzword side of this term evidence based that I am starting to see which is kind of not so good. And a lot of these people either don't understand what evidence based practice means or really don't know the concept of science I think in general. Like truly understanding what science is, they think it's a thing you do as opposed to this process. However, they are trying to jump on this evidence based bandwagon. But just in general, I am wondering, do you have any observations, both good and bad about, I suppose this growing increasing interest in evidence based practice within nutrition, training, health and some of the, I suppose things that people should be aware of when they are hearing that term?

JORDAN Feigenbaum: Sure, yeah. Well, overall I think it's great. I think, getting more people interested just in the sciences in general is awesome, and particularly people who are going to actually read the studies, that way there's more than just two or three people reading each paper, the editor, the author and the author's mom. So, that's great. The problem is, if you don't have a background in science or you haven't been doing this for a long time, then, you don't have the background of information needed to interpret each study until you do, until you've gone through hundreds of papers plus the textbooks and you have a foundation. So you read a paper and you read the conclusion, the author's conclusion and then let's say you take the next step, which you should, to read the methodology and look at the raw results and kind of toss those around your head, and so now you have a different opinion on something maybe. Well, you have to take that in consideration and into context with what you previously knew about the topic, and hopefully you had a fairly robust knowledge of the topic beforehand,

so that way you can kind of temper these newfound findings or new to you findings.

I think what we are seeing a lot of is people who are just new to the science game, which is again, we all have to start somewhere. I mean, when I look back at the mid 2005 to 2008, when I was writing stuff, if I look back at some of the stuff I was writing, I am like, oh my god, this is so bad, like, I can't believe that you would write these things. But, yeah, it's just...

DANNY LENNON: I know that feeling.

JORDAN Feigenbaum: Yeah, hindsight, 20-20, as your knowledge base expands, your fund of knowledge expands, then not only does reading the paper become easier, it becomes more rewarding, because you get to pick out like, oh, this is an interesting method, I wonder why they do that, that doesn't make sense; why do they come to this conclusion, that totally makes sense; or it does, like, wow, this is an elegantly done study, which is the fancy way of patting your bros on the back for job well done.

So my advice to folks out there would be read voraciously, gather as much formal and informal training as you can on the stuff, and the longer you've been doing it, the better you will be able to put the stuff into context. You will notice that if we allow ourselves to call some people in the strength conditioning world, in the nutrition world, titans, these big voices in our community, if you notice, they very rarely make bold claims that are significantly different than what they said before. It's always small tweaks or alterations to their path. And I think it's like a boat's rudder. They read something or a handful of things, it just changes their opinion slightly if the evidence is good; or it doesn't if the evidence is not so good, rather than these whole whirlwind changes. That just doesn't really happen when you have this good fund of knowledge because you have such a big base of data that when you read one paper, you don't change the direction of the ship. And you don't hear them say, "Hey did you see that one new study?" Like that's the other thing that's talked about. It's more of, you know, overall the totality of the data suggests X.

I will give a practical example and then you can tell me that I've been longwinded. But in reviewing, so I wrote the portion of this up-to-date article on hypertension, so high blood pressure. And just the TLDR is in general resistance training with lower blood pressure, resting blood pressure, and it'll lower it more in people who are hypertensive than those who are like pre-hypertensive, which is an antiquated term or who don't have high blood pressure. And this is despite the fact that blood pressure goes up in general during exercise and in resistance training goes up markedly, I mean we are talking about 300 systolic over 120 or so during heavy resistance training.

But in any event, you go and you look and you keep reading, and you keep reading and you find support that the blood pressure on average goes down after resistance training and even absent weight loss and that there's some vascular remodeling that occurs that's beneficial to tolerate those sort of blood pressures. But then you find one study and it says that resistance training has a negative effect on endothelial remodeling and it's like if you just read that and you didn't read the other 160 papers or so that I went through, then you are like, well, resistance training is bad for blood pressure, it's just bad. And that's evidence based, because there's a paper, but you need that sort of big base of knowledge and exposure to that subject matter to really be able to take that into context and then further actually applying to people so you have this sort of evidence based practice as well. Like, it needs to be applied, so that way you can take in both your practical experience and your knowledge and kind of meld those two together. That's a long way of saying, hey you all, just read more and then if you want to troll us with your study questions, that's cool, but you better have your ducks in a row.

DANNY LENNON: People will be coming with that one paper on blood pressure to come and get you saying that, all your conclusions are wrong, you don't know what to...

JORDAN Feigenbaum: Yeah, right, all of them, yeah, you suck, all these things.

DANNY LENNON: Jordan, we are going to start rounding things up just for the sake of time. It's gone quite quickly which I think is always a good sign for conversation. Before I get to the final question, again, just remind people where they can go and find more of your work online, where they can find you on social media, and any other thing that you want to mention and divert their attention to.

JORDAN Feigenbaum: Sure. So, website is www.barbellmedicine.com. That's where you can keep current on all of our podcast and media, blogs and other fun stuff. My Instagram jordon_barbellmedicine. I am pretty active on there. So it's another good place to check us out. We are on YouTube. Barbell Medicine is the channel name. Yeah, I think that's pretty much the easiest way to keep up-to-date on what we are doing.

DANNY LENNON: Sweet. For everyone listening, I will of course link all that stuff in the show notes for today's episode so you can go and check all of that stuff out. With that Jordan that brings us to the final question that we always end the show on, which can be to do with any topic even outside of anything discussed today and a quite open and broad question, so forgive me. It's simply – if you could advise people to do one thing each day that would have some positive benefit on any area of their life, what would that one thing be?

JORDAN Feigenbaum: It's a great question. That one weird trick.

DANNY LENNON: Right.

JORDAN Feigenbaum: I think most people would probably be expecting me to say something about resistance training or exercise related but this is something that is a passion of mine as well, the mental health aspect, just the human experience. So if you could do one thing each day that would benefit your existence and your neighbor's existence, it would be to communicate on a personal level with a friend, tell them how much they mean to you, what's something positive about them, and express gratitude for having them in your life. Mental health is a huge passion for me. And in America for instance there's over 20 million people who have diagnosable depression, less than 40% of them will actually get diagnosed with it, and less than half of

them will be adequately treated. So, it's a big deal and it's a big problem and I think we are so in our intuitive technology, in our own lives everyone is super busy that sometimes we can go whole days without really connecting with somebody else. So, my one weird trick to living a more satisfied and more robust life is to connect with somebody personally each day, and express gratitude to them.

DANNY LENNON: Awesome. I love it. Brilliant way to round this out and with that I want to say, Jordan, thank you so much for not only giving up your time today but also for the great information and the continuing great work that you are doing and the information you are putting out, it's very much appreciated and very valuable and like you say, it's very noble cause given the fight that you are fighting for getting people healthy. So thank you for your time.

JORDAN Feigenbaum: Thanks Danny, thanks for having me. And Sigma Nutrition listeners, thanks for tuning in, don't troll me too hard on the internet.