



DANNY LENNON:

On today's show, like I said, Arthur Lynch is here with me, and we're going to talk over I suppose the general theme being things that in the past, we have either had wrong, had misconceptions about, maybe that we've changed our mind on now or that we falsely believed in the past and now have come to see a different way. And so with that Arthur, welcome to the podcast again.

ARTHUR LYNCH:

Thank you very much Danny, how are you doing today?

DANNY LENNON:

I'm good. I'm looking forward to this. I think this is a good topic to get into, and I should mention for people listening that it was in fact, your idea to bring up such a topic and I think it's interesting to talk about. So maybe that's a good place to jump in. Why did you feel this particular theme, I suppose, was something useful for people to hear about and something useful for us to talk through?

ARTHUR LYNCH:

Yeah, sure. Well, mistakes that I've made is something that I can talk enough a lot about, because I made a lot of them. And I guess one of the things we try to do with Sigma, what the main thing I guess really is to educate people and inform people as best we can. And if I can do that through sharing experiences from myself or yourself Danny about how we've been led astray essentially in the past, maybe it might help

someone from making the similar mistake. That's how I see the general theme of this podcast.

DANNY LENNON:

Yeah. I think there's a lot of value because I think certainly in my case, one of the big things over time has been learning how to be a better thinker and not necessarily believe things just because we were told them, and I think doing this may be able to illustrate to people that you don't need to have everything figured out as long as you're aware of how to maybe go about that process of thinking. So where is the best place to start? What is the first thing maybe you'd like to kick us off with? Is there any particular issue that you think will lead the show with?

ARTHUR LYNCH:

For sure? Well, a theme would be, I guess, being led astray by bad information, and that can be from someone who perhaps doesn't know any better, or it could be someone trying to make money from you, or it could be just someone who's just trying to lead you astray.

So the first one I have here would be a mistake I've made is being naive enough to believe someone who sounds like they know what they're talking about, and often loosely using scientific jargon or terminology that makes their argument somewhat plausible, if you didn't know any better, but in fact it's false and it's usually spreading a bad idea, or perhaps pushing a particular program or protocol on someone promoting a particular supplement, this kind of thing.

Or for example, some people trying to sell some product or something online, and it's shrouded in hyperbole and extrapolation of science, and often times the cherry pick science or find a find a reference and then say, oh, well, look, I have references for what I'm saying, but that reference might be completely unrelated to what they're talking about or really bad extrapolation of, for example, animal work or something like that. So that'll be where I'd start anyway.

DANNY LENNON:

Yeah, I think that's a really good point. I actually had a conversation when Ben Esgro was on the podcast on similar type of issue of, his term he used was fake science of people who are using scientific language and talking about scientific concepts related to training and nutrition. But it's not really

a true representation of science in that they're not thinking with the scientific method in mind or not thinking about what evidence-based practice means. They're just using or like you say, cherry picking studies to make what they're saying sound scientific.

I've said before on the show that something like that is more deceptive in a way, because it's harder to pick apart like obvious quackery and the Doctor McCoys of the world, for a lot of us at least, the obvious quack stuff and homeopathy, and David Wolfe and all these crazy people, that's almost obvious at the front end for a lot of us. But where becomes a bit if he is if you have someone who is saying that using a lot of scientific terms, maybe in some cases, these half-truths but using that as a way to push an agenda that's not entirely correct.

We've seen people who have PhDs do this, or people who in some cases used to be involved with the academic institution and now are not, who have done similar things. So yeah, I think it's an interesting one. This fake use of science I guess, or jumping on this evidence-based bandwagon, so to speak.

ARTHUR LYNCH:

And just to touch on that last one, and as you knock on singing out individuals but I guess that's when it can get a little bit difficult to perceive. So when someone is educated, they are a doctor or a PhD or someone and they're promoting a particular idea and you think, oh, this guy is qualified. Surely, what they're saying is in fact true, but their motives may not be what you think they are.

DANNY LENNON:

Yeah, this kind of ties into something I was going to maybe touch on later because it was something I came up with when you bought this theme up of one of the huge things that I think I do differently now to what I used to was being in a place where now knowing how to think instead of just what to think. And I think that's a hard concept to get across to people because it takes a lot of time to refine your ability to be a critical thinker. That term is thrown around quite a lot but it's difficult to really refine that.

But the value in that is exactly what you're saying for people listening, you might put up a very valid case. Well, how can I,

just someone trying to look for better information, go against this person, who's a medical doctor or a PhD? And the good thing is you don't have to pick anyone in particular to follow even who we think is classed as the good guys. We're just trying to tell you, here's how you should think and how to be skeptical. And then you judge on who makes the best case, I guess.

ARTHUR LYNCH:

For sure, yeah. And then I guess it was to give a few small nuggets of advice. One would be an expert opinion at the end of the day. It's still an opinion. And the other thing as well is a model I like to go by, is that the status quo is like the known hypothesis or whatever you're saying isn't true unless I'm convinced otherwise by a substantial amount of evidence that it is true, if that makes sense.

DANNY LENNON:

I don't know who I heard saying it the other day. I think, I can't remember now but there again it was a similar topic being discussed where they essentially mentioned that, that when you see most of the people who hold that we would say are typically in the evidence-based sphere that are putting out sensible information over time. What you see is that they are very open to new information, but their general ideas over a long span of time don't radically change.

It is a fairly standard position and sensible position they're in and then over time it does change but with new research that comes out, they don't just take that and flip everything they're doing based on one study, they'll use that to integrate it, and maybe change slightly how they think of something as opposed to a lot of people now taking a concept within science and just whatever is popular in the mainstream. Now that's the thing they're talking about. You see all these gurus all the time now, they bring out a program about microbial and the next they're talking about aikido just because that's what people are talking about now as opposed to that person actually being a true expert, I guess.

ARTHUR LYNCH:

For sure yet. And then another example there would be a few years ago back in my bodybuilding days, a really hot topic was the issue of higher intensity forms of cardio to cut and a huge proponent of the high intensity interval training was

Layne Norton and he was saying you know, if you're still doing low intensity study state, you're an idiot, you're going to, I might call it immediate sport, you're going to lose muscle. This is the way to go forward. This is the only way that you can preserve your hard-earned muscle mass and still get down to stage levels of leanness.

And obviously, that's shrouded with hyperbole of what we just talked about and now, more recently, he's gone back on what he said in fairness to Layne, he said look, I was wrong. I probably extrapolated beyond what the research actually said and I was wrong, actually owning up to it in fairness.

DANNY LENNON:

I think that's important because I think, like we just said before, we started actually recording. One of the big things we wanted to get from this was we're not just trying to say to people, here's things that we've had wrong or things that other people are doing wrong or using evidence incorrectly and don't go and do this. It's more to show, look, no matter who you are, whether that's they Layne Norton, whether it's me, whether it's you, we've all in the past had stuff that we had incorrect or had false ideas about, no matter where we got them from.

And I think it comes down to what you choose to do with that when you're encountered with better evidence. So the people who are making the mistake is who have this false belief and still cling on to it despite being shown better quality evidence. Whereas having a wrong idea in the first place isn't the issue, so to speak. I think that's an important thing to get to.

ARTHUR LYNCH:

For sure and I guess we can segment from that into another point I have here, which is clinging onto those ideas that you may have fallen for and finding it very difficult to let go of these bad ideas or poor habits that you might have picked up because someone led you astray. The things that aren't getting you closer to your goals either because they've just become a habit for you, or perhaps there's a slight feeling of shame on your part, that you're ashamed that you were actually wrong about following that bad idea. I guess what we're trying to say here is that no one's perfect. Everybody's

open to the possibility of being wrong and it's hanging on to those bad it is when the counter evidence is there. I guess that's kind of the problem, I guess from that point of view.

DANNY LENNON:

It's actually something that was talked about on the show before I had an episode that I call I think, *The Best Way to be Wrong*. Episode 102, if people are looking for it available is an article as well. We're essentially, like we just mentioned there in the examples you gave like being wrong in the first place isn't necessarily the issue. And there is some issues that we can talk about maybe in a while where it could be. But in general, if you've had good intentions and based on what you know now, like you're trying to conclude the fairest thing and you just have something incorrect, that's not a problem until you are encountered with better quality evidence, or someone tells you're wrong or supplies you with better quality information, and then it's down to what you do from that point there. So the bad way to be wrong is to go and just like you say, hold onto that belief to dig your heels in and go and cherry pick more studies to try and prove what you're saying, dismiss what others are saying and saying that they have some sort of agenda as opposed to just being open to look. Maybe actually, I was wrong, admitting that you were wrong and now being clear on where you want to change that position I suppose.

ARTHUR LYNCH:

Yeah and we see that a lot, I guess with guys who are proponents of these ideas who are slow to let go of their beliefs. They have oftentimes vested interest in whatever ideas they're promoting. Guys like for example Gary Taubes who has financial interest in the ideas he believes.

DANNY LENNON:

It's surprising to the degree now of particularly, he did raise some interesting points in the beginning, and certainly, I think there's some value to the conversation he initially brought up when his first books came out. But this point, particularly over the last number of years, when you look at the research that's been done in highly controlled environments, just overwhelming amount.

Now, we've had two published papers that have been trials funded by NuSi which he set up with this idea of addressing

these questions. And still, we're yet to see any back track on it, which is kind of interesting. But I suppose like you say, given the positions, people can dig themselves into maybe not all that surprising.

ARTHUR LYNCH: Yeah, I actually didn't know about the funding thing up until a couple of days ago. I just find that hilarious.

DANNY LENNON: So in fairness and the only thing I can... they did want to make sure that it was independently done, that they weren't interfering with the researchers and the data being published, but you would have hoped that if it had gone against some of their hypothesis, you would actually see that acknowledged. But to this point, as far as I'm aware, it hasn't been. So yeah, I think that is certainly the error of clinging on to positions and not being able to move away from them.

Reminds me, there's a, like we're saying, for all of us, we're still trying to learn stuff and will no doubt we still have things wrong. So it's probably a point of don't let the fact that we could be wrong about stuff or most likely are still wrong about some things, paralyze him into not doing anything with clients or not trying anything or not saying anything. I think it's very fair to that kind of all expression, strong convictions, loosely held. So if you have something that you believe now, you have some research to back that up that you as the best of your knowledge, it's true then be strong in that conviction talking about it, but hold that conviction very loosely in case you're brought up with better information. So I think that's a good way to generally think about the kind of idea.

ARTHUR LYNCH: Yeah, absolutely. Just to change tac now. Another mistake that I've been certainly guilty of down through the years, and I guess you might call this, I'm probably as bastardizing this a little bit, but the 80/20 rule, so not accepting that the vast majority of your results are going to come from adherence to a few key fundamentals.

So for example things like calorie balance, progressive overload, specificity, these really big fundamental things that we need to get right before we start looking further down the line and what I was guilty of was actually focusing on my

minutia, smaller details that may or may not bring you closer to your goals and certainly won't bring you anywhere near closer to your goals than focusing on the fundamentals and really honing in on those and trying to get those, trying to nail those down firstly.

DANNY LENNON:

Yeah, I think it's the idea of those things are in a I suppose a hierarchy for a given reason that they're the most important. And it's not that they're the only things you tend to look at, but if you have them wrong, then nothing else is going to make that much difference, right. That you're trying to get muscle but your program isn't based on progressive overload and you're not eating enough calories, then what else is going to happen. No matter what length of the details you go through.

ARTHUR LYNCH:

Yeah, for sure. You can swing the pendulum the other way, too far where you're thinking, for example, the only thing that matters is calorie balance and macros. Whereas things like meal timing or composition of your meals, of your individual meals doesn't matter. That's going too far the other way. But I think focusing on the smaller details firstly at the expense of the fundamentals, that's kind of where I've gone wrong in the past.

DANNY LENNON:

It's interesting you give that example, because I have actually gone on both ends of that spectrum I guess, in different areas, but particularly with... I think a lot of people are aware of focusing too much on minute details of being guilty of that in the past and not done the fundamentals enough. But like you said, there is another side to that coin of just focusing on one or two big picture things and forgetting about the other stuff that counts. I remember I've talked to people before that well now, if you're involved in powerlifting or something, just kind of laugh of, when I was first getting involved in barbell training, one of the early exposures I had to that was reading *Starting Strength*, Mark Rippetoe's book.

So during that initial phase of starting to train and trying to gain some muscle, a place where I could have gained quite a lot of muscle, you go through place of coming away with that

with some maybe ill-advised ideas of... I was thinking, okay, I'm just being told, just do these big compound movements and just drink loads of milk. That's all you have to do, right? So don't worry about isolation work and blah, blah, blah. Which, I mean in general, I think a lot of beginners probably already focus on isolation or only do isolation work, and it's not going to be that fruitful, but I was in a place where a literally I can remember probably for 18 months to two years of my training would refuse to do any isolation work, just not through do a curl and think people, already it's for doing curls.

And that was probably tired somewhere to be not having big size arms at all and thinking that, oh yeah. Well, this book says, if I just drink loads of milk can do compound movements, you're going to get big everywhere anyway. And I think it's again, not in a too simplistic view of there is an understanding somewhere in the middle of the spectrum, I guess.

ARTHUR LYNCH:

Definitely. And then from my own point of view, I've done similar things. So there now where you gone from overly focused on the fundamentals, where I was a tipped up with, say, for example, when I started weight training, a big variable that I paid a lot of attention to was rest periods. When I started weight training, I bought myself a stop watch, and I set that thing off after every single set. For a long time, it was a two-minute race because I was trying to gain strength and then it's like, I can cut this down to 45 seconds. I'm going to get the most out of this session because I found when I did that, I was more tired and I got a better pump. So surely I'm going to definitely get bigger.

So I would set that thing off after every single set. And I must have driven everyone around me nuts because all their hearings is this beeping every minute or two, just my watch going off. And then I went and probably still I'm at the office direction, whereas rest periods, they don't matter at all. So just throw that stuff out your away and spend five minutes between sets of curls, so you can definitely swing the pendulum too far the other way as well.

DANNY LENNON:

Yeah, I guess it just comes down to like when in the early stages of stuff, when we don't really understand the bigger picture, the reason why we're wondering about rest periods, whether they matter a whole pile or they don't matter at all is because we don't understand the overall overarching principles. That's nutrition, or with training with this example. When you understand the ideas of progressive overload, understanding the relations between volume and intensity and frequency, and how all these things play into each other, then you start to see and you understand what your goal is.

Then the question around something like rest periods, you can answer it for yourself because then it's not like, okay, they're not going to determine these goals by themselves, but then you have the understanding to say well, if I changed them, does that affect how much volume you're going to get in over the course of the week. Maybe that has a knock on effect as a bit more I suppose a deeper level of understanding and you're almost able to answer those types of questions for yourself.

ARTHUR LYNCH:

So you can, in that example, with the rest periods, you can manipulate it to satisfy the more fundamental variables. For example, if I'm training for maximum strength, performance of the actual sets and recovery between sets is of utmost importance so that I can get in the training volume within the session and then throughout the week, and then throughout the rest of the cycle.

So a longer rest period is going to be far more favorable for that. When we're talking about hypertrophy training, an important aspect that we can overlook is the actual accumulation of metabolic byproducts within the muscle because that's been shown to be perhaps a predictor of muscle growth. So in that, and in that example, we would use a shorter rest period so that we get incomplete recovery between sets and then we can keep chasing that metabolic stress if you like.

DANNY LENNON:

It's again, understanding those bigger overarching principles and then knowing what the goal of what your training is

supposed to be achieving in that sense I suppose, instead of there being one answer to the question of what is my optimal rest period, I guess. That's interesting.

It's things I've had incorrect before as well of just putting too much faith in things like a supplementation. It's probably a good one because a lot of stuff of look in the effects of specific types of micronutrients and then saying, okay, a lot of people maybe don't get enough to at the time or something like selenium or iodine, or looking at magnesium or something like that. And then thinking, okay, well, I'll get individual supplements for each of these and he gets super high dose and not really understanding that the relative effect they're going to have and the overarching idea.

Somewhere things like nutrient dimming. I think that's a good example to show that kind of swing of the pendulum, because before people are super dialed in on specific times of diet they eat specific nutrients. Now and then probably don't matter that much but at the same time, now people thinking nutrient time doesn't matter at all when it has a very real effect, particularly for someone caring about performance, especially. So yeah, it's surprising how many of those things are a pendulum and trying to aim for the middle.

ARTHUR LYNCH:

For sure and I think that will be a topic for another podcast, it's just the pendulums within the fitness and nutrition industries where you see things like saturated fat, for example, where you've gone from recommendations to avoid saturated fat, or at least avoid high levels of saturated fat within your diet. And then a little bit of information comes out that says well, perhaps we don't have to worry about it to the extent that we were up to now. And so then someone latches on to that and says, great, let's start putting butter in our coffee and drinking coconut oil and all this kind of stuff.

DANNY LENNON:

Going completely over the top of it. Now that's kind of super food type idea. Yeah, that happens all the time. It's surprising I think, in the Sigma seminar that idea had for those different, everything is on a spectrum and you see these two extremes and literally any topic and nutrition you pick and you can put on this extreme. And most often the

truth is in the middle somewhere, and that will extend up to the training and health and everything else. I guess.

ARTHUR LYNCH: Yeah, definitely. That was the exact thing that came to mind.

DANNY LENNON: Any other examples of things that particularly that either in the past or even recently that you've changed your mind on, or you felt was wrong or you think are just useful to tell people about?

ARTHUR LYNCH: Yeah. Well, I've mentioned it earlier on but definitely one I would like to reiterate is that an expert opinion is still at the end of the day, an opinion. A mistake I've been guilty of is so believing commonly used or, sorry, no I'll come back to that one. So just believing someone that I respected within the fitness industry because I looked up to them or something like that and some particular idea that they are purporting. I trust their word without really questioning the evidence base behind us. What's their reasoning for promoting this idea, again are they're trying to sell you something, that kind of idea.

DANNY LENNON: This is huge because I think this is pretty obvious in some of the places that you see online where people are very dogmatic about certain types of eating regimes or whatever it is whether that's now popular ones, aikido or intermit fasting. You see people who are very, very dogmatic about how they're thinking and always their response, if they're questioned on it will be, well go and look at what so and so says. And so this appeal to authority of some sort of guru.

But the issue now is that people maybe don't as easily realize that this still happens in every community. As in you look at the evidence-based community. I see people all the time that they will only believe what these two or three people say. They will only listen to this one person. And what they say is infallible truth, and anything else against that is idiotic. You have fan boys that follow people who have put out good information, but they're still committing the same problem of just being like a fan boy that doesn't critically think about what this person is saying.

So that's like, pick any one the top of the evidence-based field, and there's people following that person, that just blindly follow them. So sure they're going to get stuff right most of the time just because who they're following is generally right, but they're still blindly following, I guess.

ARTHUR LYNCH:

Eric Helms has talked about this. He said that people will follow me and they should, he's a great guy, but the ideas that he's purporting, he still encourages people to be critical of them and to question him on them because that helps develop that individual's critical thinking skills. And it also improves, for example, Eric's own thinking about his idea and not to get locked into his own internal biases and that kind of thing.

DANNY LENNON:

It goes back to that point, I think of the how to think versus what to think, because I think hopefully and I'm guessing, but I hope this is what happened with Sigma Nutrition and the idea of the podcast was never to use the show to tell people, this is what you should think on this topic. It's more to say, here's an interesting conversation or here's my current belief on this issue and evidence to support that that I think might be useful. And then for people to think about that and use that to inform how they think on a certain topic, and then be even beyond that, to get tools to see how all these different researchers and practitioners, how they go about evaluating things, and they try and be like that in the way we approach nutrition and training as opposed to what are the facts I need to know because we'll never memorize enough facts.

We'll only have tools of how to evaluate new information and almost like having a good bullshit meter, the more and more you get good at critically thinking. Now, even if it's not something you've looked into just by how someone says something or the type of information they're putting out. You'll have some red flags that something sounded a bit off here. And I think that's hopefully something that's been done with the information.

And actually something me and Gary were talking about yesterday in relation to the coaching. One of the big things

that he pushes with his clients is when they sign up for Sigma Nutrition, the idea isn't just, here's what you go and do now. It's like, okay, during this process, how are we going to let you learn things and develop skills in the way he does that is when someone has a question, he'll often ask them, well, what do you think you should do? And almost getting to the point where people now are actually able to answer questions and when they can answer their own questions all the time, they don't need us.

ARTHUR LYNCH: It's not great for business Danny.

DANNY LENNON: In one sense, you could say on the surface, no, but it actually is, that's what gives the reputation that it does. That's where I think maybe a lot of people fall down with coaching and a poor coaching service, where the goal is to, how can I hold on to this person for as long as possible versus how can I teach this person enough so they don't need me. And once they're gone, because you've done such a good job, you'll have more enough people that fill that spot because now you have those are people who have these glowing references of how you do work and they've actually got somewhere.

And then just generally the ethical point of it as well. That's what you're trying to do, like help this person. If you help them, great, if you didn't help them, no good.

ARTHUR LYNCH: Definitely and one of the things we wanted avoid at Sigma is a dependence to the point where the client is essentially in a situation of right, what do I do now, coach? And they can't kind of thing for themselves.

DANNY LENNON: I think that's essentially that. It's like how do we get to a point where we're guiding someone through something and have taught them enough that they can, again, answer questions they have, and then almost just check in to think if we're right and if there's something's just a little bit incorrect, then we can show where that's wrong and maybe guide them more and more.

So I think it's a big distinction and it's not an immediate thing either. That takes a bit of time. There's certain, like when you have new client, there is a long process of actually

just getting them to execute on stuff and follow clear actions. And I'm not going to be answer their own questions, but a few months down the line, then you can start opening up to that type of stuff, I guess.

ARTHUR LYNCH:

To follow then from that point, so this has been in more recent years, I've been guilty of this one, and this is believing commonly used or recommended practice, just because the general anecdotal consensus would be that would be effective or that it would help me. An example I would give here is massage therapy, so people I respected who weren't necessarily people in the scientific community are maybe not directly in the fitness industry, but they would recommend massage therapy for example.

And I took that without exploring it more myself, and there was a certain degree of laziness on my own part that I didn't actually look into the science myself and see that this is probably a lot more equivocal than I thought. And now am I saying that massage therapy can't work? Depends on what your definition of work is, but for example, I would have believed that massage therapy released knots, that would reduce injuries just blindly following these ideas because they felt good for example.

But again, falling down that rabbit hole of not actually critically analyzing the use of this modality and looking into the science behind it to kind of see where the claims that were being made about it backed up essentially.

DANNY LENNON:

This is a good one because I'm the very same that I would have gone along with what you are saying of massage therapy and just believing that's good for recovery and athletes do it, so it must be good. I can feel this nut releasing, or I'm a bit looser analysis, it's got to be helping. And again, I suppose not applying the same process that I would apply if someone told me something about nutrition, and this is actually quite interesting and very useful, I think for a lot of us, and particularly those listening, who are coaches of understanding why a lot of people maybe don't evaluate information critically because they're not directly involved in nutrition or training.

They have an outside life. They don't maybe have the tools, whether that's an understanding of science or the time to go and think about all these ideas deeply and the same way that we probably didn't give or do with children to looking at massage therapy and other related modalities. But then when you do and you come across information and talk to people like Quinn Henoch, Paul McCarroll we've both talked, learned a lot from him. And you start to see some of that, what's in the research and start look at actual pain science, and we start to have a much wider view and you see actually a lot of the stuff isn't evidence-based, and I would have known that if I'd actually just gone and checked in the first place, but because it was outside of my little sphere of interest, I didn't do that.

And so I think it's a good warning signal to people. Again, what we're saying before, be critical and don't just accept the information.

ARTHUR LYNCH:

Yeah, 100%.

DANNY LENNON:

No foam rollers people. For anyone listening, who doesn't read articles on the Sigma Nutrition website, there's actually a couple of pieces related to just that portion from manual therapy or massage therapy that you can go and check out that's there. One of them co-authored by Arthur himself looking at certain claims made by foam rollers or proponents of foam rollers that do things that they do not. And another piece by the aforementioned Paul McCarroll wrote about manual therapy, and does it actually work. Both of those up on the Sigma Nutrition website, and I'll put a link to those in the show notes episode. But yeah, it's just one of those interesting areas that you see a lot of light bulb moments.

I was only talking to Jordan Feigenbaum actually the other day. One of the big things he sees with a lot of patients is again that whether the misconception around this pain science issue, that big idea of pain, being equal to some sort of tissue damage or tissue dysfunction. And when you actually look at current pain science, that isn't there, pain doesn't mean there's tissue damage and tissue damage doesn't mean there's pain. That correlation is super super

weak. For me when I first heard that, I was like, oh shit, this opens up a lot of questions. And then you actually start looking at some evidence-based recommendations and you see it's counter of the stuff people are believing.

ARTHUR LYNCH: Another one from my discussions with Dr Paul McCarroll, I found fascinating was when he was telling me about the sham surgeries and how pain is embedded in your psychology whereby they can actually perform a sham surgery, open you up, close you up, do nothing to you in the meantime, and you'll actually recover. It's just mind boggling really.

DANNY LENNON: Some of the stuff on pain is just so crazy that when you think, like even stuff that I have no deep understanding of, of like things like phantom limbs, where someone has had a limb amputated and then they can feel pain in that limb that isn't actually there. So their leg is gone and they feel pain in their knee, but they don't have a knee. That is beyond crazy for me to even think about and yet how technically accurate I'm describing, I don't know. But that general phenomenon and things related to pain science are just super interesting.

ARTHUR LYNCH: So that is just about everything off my list. Is there anything, any other mistakes that you've made Danny that you might want other people to be aware of?

DANNY LENNON: I've made a lot of specific mistakes and I think I mentioned a couple of them. There's probably, I could go on all day specific stuff around nutrition. I was very much for my own personal experiences, way back in the day, very much enjoyed doing low carbohydrate diet, paleoish type kind of template. That was the way to go. Any processed food was super bad. Glutton should be avoided, pretty much across the board. All the typical stuff now that we try and tell people that maybe we should think a bit critically on because it's not that well founded. I've made all those mistakes.

And so I think that should serve to show people that is not necessarily bad to have thought that as long as you can correct that if you've been made aware of better information. So there's loads of that stuff. And other specific examples I think one outside of nutrition that I put down that's related

to training was over analyzing movement and the need for symmetry and over analyzing technique for something that I was quite functionally, generally doing pretty well. So say something like a squat movement, over analyzing the symmetry between my feet and my hips and everything being perfectly bound.

I decide when we know that doesn't really is actually desirable to some degree depending on how some of this is made up. We're only talking about the summer set article that I sent on the other day. He talks about that idea and then just generally the large idea of the same technique. Once you're proficient to level of beyond the beginner stage, your intermediate I would say, once you're at that certain level of proficiency, there's probably a tendency to over analyze technique and make drastic changes to your technique in the movement when they're probably not actually required. So those things are mistakes made there. Everything else I think I've mentioned.

ARTHUR LYNCH:

Just on that last point, I want to give just a very interesting anecdote that I heard before about Ray Williams. Just on that idea there of symmetry in your technique, for listeners who don't know Ray Williams, this is a USAPL power lifter who can squat over thousand pounds in knees leaves only drug tested but what he said before, when he walks out of heavy squat and his feet are off, they might be perfectly symmetrical like they would normally. He doesn't go adjusting them. You can't do that with over thousand pounds. If it works for Ray, I mean. [Laughs]

DANNY LENNON:

There's going to be just natural asymmetries in people just based on a whole ton of stuff. I guess for me, I'm sure there's some due to sports I played growing up. Like playing something like soccer and Gaelic football, where I'm right-footed, that means if I'm playing Gaelic football and I'm kicking with my right foot, the vast majority of the time, that means I'm going to be standing on my left as I kick with the right.

So that's going to have some sort of naturally symmetry. Same if someone who is playing baseball or something else

like that. If it's not causing damage and pain, then the asymmetry is probably not something you should force to go against. When I squat like force my feet to be in a specific position, because then you're actually probably just making it worse. So yeah, things like that. And then obviously just the more broader sense of over analyzing, I guess not saying less analysis isn't useful, but again.

ARTHUR LYNCH: Again it comes back to the pendulum idea.

DANNY LENNON: It's not even analysis, it's probably the response to the analysis. I think it's good to take videos of your sets for example and then use that inform okay, I didn't do something so good here, but the difference is noting that you didn't do something here and saying, okay, I'll just focus again and get myself set and hopefully next week better versus oh my god, I need to change all these things about my technique. I'm not going to break at the hip anymore, I'm going to break the knee or I'm going to change fucking something really drastically based on maybe a tiny bit of information. So probably yeah just over overshooting the response, I guess.

ARTHUR LYNCH: Yeah. Are completely stripped the way back is like, oh God, I need to rectify this technique error before I even dream of increasing the weight on the bar.

DANNY LENNON: I think Mike T has a lot of good stuff. And this is his 80/20 stick. If you're like 80% or higher like pretty good technique-wise, then sure, look to improve it but stay biasing yourself towards adding more weight instead of thinking you need a drastic go overhaul of something.

So yeah, there are some things I had and like I say, if I stuck specifically to nutrition details, we could be here all day. But I think the general bigger ideas we discussed are probably more important. How to think, how to be critical, not to just base your beliefs on someone's authority, or whether that's someone with big following or credentials, and just learn how to think for yourself and generally fall somewhere in the middle of the room most of the time, the bigger ideas. Any kind of summary or key things you want to leave people with?

ARTHUR LYNCH: Key things that I guess I want to hammer home would be the goal of this podcast was to just inform listeners that guys like ourselves who are educators in nutrition and training, we have made a lot of mistakes over the years and some of them in fact, even recently as well. So we're still open to the possibility of making these kind of mistakes, and we can believe ideas that may in fact be wrong, and to create an awareness for how to spot bad ideas and how to look for the good information, how to be, what does it really mean to be a critical thinker? What are the fundamentals of that? And just thinking about it in a sense of the status quo is that I remain unconvinced about your argument until you provide substantial evidence to convince me otherwise. I think if you go by that model, you'll avoid a lot of these mistakes.

DANNY LENNON: Yeah, I completely agree. I would echo most that you've done a pretty good job rounding that up. The only final thing I'll maybe add to that is that we may be touched on, but I didn't directly talk about is that the more we learn stuff and go through this, the more aware you are of what you don't know and the more I see just how little I actually know about stuff, brings that humility but that openness to say, look, this what I currently believe now, but good chance I might change my view on it because you see how much you don't know.

And I think if you're someone out there now who's maybe at a point where you think you have all this stuff figured out, it probably means you're at the earlier part of your journey, I guess and in time you will realize that you don't have it figured out, because that's what I used to think. I used to think I've got this thing down like if people just ate this way, we wouldn't have this obesity epidemic. I remember having that thought. If people just went on this type of diet, we'd be fine.

But you start see how complex things are, and so realize that there's a lot of stuff you won't know. You will never get to a point where you know that you just over time realize how much you still need to learn.

ARTHUR LYNCH: One last I might add as well. I'm sorry because I'm delaying the wrap up, but despite what I said earlier on about an

expert opinion still being an opinion. Yes, that is definitely true but just from my own observations that the people that I know and respect within the fitness industry who are spreading the good information, you can generally pick them out as they make claims that are tentative, and they're very conservative in how they would broadcast their ideas or their current thinking, and they will change their stance on certain things if sufficient counter evidence is provided.

And then on the flip side of that, the people who are spreading the bad information are the people who are blowing things out of proportion, spreading hyperbole about an idea that it's the cure for all your ailments or speaking in absolutes for sure.

DANNY LENNON:

That's a really good point. That's certainly a red flag, I think. That gets us to the end of the show. I think for those of you listening, hopefully there was something in here that was useful and got some cogs turning in your head and got some ideas that you can go and think through. Hopefully, maybe changes how you think about stuff or how you decide to view things from now on and realize that no matter what you have thought or currently think if it's incorrect, then we've all been there. We've all done that. It's just all down to your response from here. So let us know if this was useful. Please give any feedback on social media anywhere like that. Arthur, where can people find you on the internet? Anything else you want to mention?

ARTHUR LYNCH:

I'm very easy to find on the internet because I don't use any complicated and super hard names or anything like that. So you'll find me on Facebook as Arthur Lynch. You'll find me on Instagram as Arthur Lynch. All one word, my email, if you want to contact me through that is arthur@sigmanutrition.com. So easy enough to remember and I don't really bother with Twitter to be honest so that's about it.

DANNY LENNON:

You can go check him out. I'll put all that stuff in the show notes so you can go follow Arthur online. I'll also link to some of the articles on the Sigma site, that Arthur's pen, and also information. If you are interested in receiving

coaching from Arthur, specifically those you interest in power lifting, you can check all that stuff out on the Sigma website.