

Danny Lennon: Hello and welcome to the show. You are of course listening to Sigma Nutrition Radio hosted by me, Danny Lennon, and this is Episode 149 of the podcast, and as always we're going to be discussing nutrition and performance from an evidence-based perspective.

Before we get into today's episode, I just want to remind you guys that you can get free access to the VIP list for the soon-to-launch Sigma Weight Cutting System for MMA and boxing. This system will essentially give you a step-by-step blueprint of how to fuel training and recovery, what weight class to select, what weight to maintain during training blocks, how to gradually bring weight down without hurting your performance, and then how to actually set up and customize the weight cut to make weight for a fight effectively, and then the strategy to refuel and rehydrate afterwards so that you feel awesome by the time the fight comes around. This is just a system based purely on science and what we know works and what I've seen work with the number of professional fighters that I've worked with both in MMA and boxing.

So you'll get a detailed breakdown of how and why to do all of that as well as then some resources that you can use to plug in your own details, and then create a customized weight cut plan for yourself so you can make weight effectively. So access to the VIP list will give you access to a number of things. First, you'll be able to get some private webinars on weight cutting strategies and performance nutrition for MMA that aren't going to be available to the public. You'll have first priority in purchasing

the system when it's available, and then also a special prize that won't be available at general sale.

So if you want to get on that VIP list or just hear more details about the weight cutting system in general, then just go to SigmaNutrition.com/weightcut. So that's all the one word. So that's SigmaNutrition.com/weightcut, and then if you go there you'll find all the details about that and then how to get onto that list.

So, on to today's show and I'm delighted to have one of the people in the field that I respect so much back onto the podcast, Dr. Mike Israetel. It's probably been close to two years since Mike was last on the show. I think that was way back in Episode 43, if I'm remembering correctly, which is still one of the most popular and downloaded episodes that we've had to date. And if you haven't heard Mike talk before, you'll see for good reason as well why that was so popular.

For those of you who are familiar with Mike, then I'm sure you know just how good he is and the quality of his information and you're just as pumped for this episode as I am. For those of you who maybe aren't as familiar with Mike's work, very briefly, he's currently a Professor of Exercise Science at Temple University in Philadelphia as well as consulting with a number of elite strength athletes, combat sport athletes, people that are competing in all sorts of different sports, and he does that as part of being the Head Science Consultant and Coach with Renaissance Periodization. And with Renaissance Periodization, he's also authored and coauthored a number of books and manuals, some of which we'll discuss today. From his academic background, he has a PhD in Sport Physiology from East Tennessee State University, and then over on the sporting side he has experience himself as a competitive powerlifter, a competitive grappler and also as a bodybuilder as well. So, a really, really good mix and you'll see why and how all that experience ties into really being, number one, has great information, but really communicates it very effectively.

You'll be able to find the show notes to this episode at SigmaNutrition.com/episode149 where I'll link up to anything that Mike might mention, where you can find more about him, get a transcript to the show, etc., etc. anything relevant to this episode. So let's not waste any more time and let's get Mike Israetel on the podcast.

Mike Israetel, welcome to the show.

Mike Israetel: Thanks for having me.

Danny Lennon: Oh, man, looking forward to this conversation. The last time you were on, which was one of the most popular episodes that we've had to date, we discussed around some of the factors relating to nutrition and how that affects body composition specifically, and then we kind of talked about how there was this hierarchy or prioritization of factors, and I know listeners of this podcast will then have also heard people like Eric Helms discuss his muscle and strength pyramid that has a kind of similar classification or prioritization on those factors for body composition. But what kind of maybe turn towards is some of the themes of the new book that you've authored looking more at diet specifically in the context of health, and so first just to get everyone on the same page, can you maybe outline what that hierarchy you developed for the nutritional factors for health actually looks like and what the order kind of looks like? And then secondly, how does that differ from your previous hierarchy for body composition specifically and how did you arrive at those changes?

Mike Israetel: Well, yeah, so the new book, *Understanding Healthy Eating*, and it's an ebook available at RenaissancePeriodization.com and we put a lot of work into this book and we're actually very quite proud of it. I think it's a very elegant piece, if I may be good enough to say so myself. So we basically have a pyramid for this book called the diet and health pyramid that orders on a priority structure of what the most important features of a diet are for health and what the intermediately important features and what the least important features are, and it has many similarities to the body composition pyramid but some key differences.

So just to get a grand tour, the most important factor probably in our estimate responsible for about 60% of all health variances in diet is calorie balance, similar to the old pyramid. Next, we actually have food composition, which is, okay, granted that you're eating calories at a certain level that promotes health, food composition determines where those calories are coming from and what the sources of proteins, carbs and fats are that contribute to calories, and we can get into more particularly what that means in a little bit. That's probably responsible for our estimate of about 20% of all health outcomes. We have about 80% right there. So, quick take-home message is, if you're eating a proper calorie balance and you're eating mostly healthy foods, then you got your health very well taken care of.

Macronutrient amounts, whereas they were second in order in the body composition structure, here they're actually third and they're down pretty close to 10% of total effect, not very much. And macronutrient amounts are making sure to get enough proteins, carbs and fats, and I can expand on this later. I think it's an interesting curiosity and to me a very interesting curiosity is that, when we get the very bare minimums of proteins, carbs and fats, and we can talk about what those are, how you fill in the rest doesn't really much matter, and I can speak to that in a little bit if you'd like. After that, we have 5% to nutrient timing. So it's very, very small; in fact, smaller than for body composition. And then each about 2-1/2%, so 5 total, for hydration and for supplements, which are very, very much tiny, tiny ingredients in the overall picture for health.

And as far as how the difference presents itself for the pyramid for...where the kind of the priority structure for body composition is that one big thing is that food composition is much more important for health than it is for body comp. You can, in fact, actually get really, really good performances and really good body compositions from a lot of lean, you know, a lot of muscle mass development and promote a lot of fat loss by eating pop tarts and drinking a lot of Gatorade but you're taking in most of your proteins through your whey protein supplements or something like that. And in fact, truly, people like to dog on kind of extreme versions of If It Fits Your Macros and saying, "Well, are we really just going to eat pop tarts all the time and get lean?" Yeah, you actually can do that to a measurable extent. You get leaner eating other stuff but not by much. For health, food composition matters more. Where your food is coming from matters more.

And the other really big difference is that macronutrient amounts matter a lot for body composition and for performance. So if you eat a very healthy diet but your protein levels are pretty low, not low to where it impacts your health but lower than certain values recommended for muscle size, it doesn't really much matter what you do other than that, you're going to be very limited in how much muscular development you have. However, for health, you can eat very little amounts of protein and be very, very healthy. So macronutrient amounts are much more important to body composition than they are for health and that's the real big difference.

I guess the small difference is that timing is 5 versus 10%. Timing is something you should probably consider at least to some meaningful extent if body composition alteration is your goal. If health is your goal, timing is a very, very small component and I can speak to why that is if

you'd like for me to expand on that at some point. And you know, the similarities, supplements are dead last yet again. I don't think anyone is surprised by that. I wish we had better news. I wish there were magic pills for health but that's the current situation as we see it.

Danny Lennon: Yeah, perfect, and I think really the big question to kind of start off with is as you highlighted, when it comes down to food composition and that being such an important factor relatively when we're talking about eating for health as opposed to probably big issue or really where most of the debates and controversies around diet comes up, is how we actually classify what those healthy foods actually are because, depending on the group that someone has listened to or the type of person who's promoting that idea to someone, those types of foods differ. One group will say that red meat can be consumed in a healthy diet, other groups are saying it's completely bad. Some people are saying you need to be gluten-free, others will say whole-grain products should be a kind of staple. So [00:11:44] kind of conflicting information. So when you were going about using that classification and saying most of your food coming from healthy foods and taking that from an evidence-based perspective, how do you define that term "healthy food?"

Mike Israetel: Well, it's really easy to define. You just look at the evidence and the comprehensive issues in the literature define it for you. [Laughs] But I'll tell you what we found, is, it's rather noncontroversial in nutritional circles but is I suppose controversial to some people who have, oh, I don't know, ideological axes to grind, right? So what we found was healthy sources, we can separate healthy foods into three sources – sources of protein, sources of carbohydrates and sources of fat. That makes it really easy to start to tackle them.

For sources of protein, and this is actually kind of a minimal situation with minimal concerns—protein source has the least impact on health so long as you're getting enough—but protein sources that usually largely avoid processed meats. These processed meats for a variety of reasons seem to contribute in a very small way but meaningful way to poor health, something like if you eat most of your meat from baloney sandwiches, it's not just the saturated fat in the baloney that's going to be a problem, it's the processing of the meat itself. The nitrates and a variety of other chemicals that are used aren't poisonous or anything, they're just not very good for most of your protein sources to come from there. So lean protein sources that are minimally processed tend to promote health very well.

If you're an individual struggling to meet protein needs, they tend to promote health much better than plant proteins, but you can get enough plant proteins to provide for a lot of health. So what we really say, it's complete and complementary. Plant proteins are very good for health and lean animal proteins are good for health.

The reason we say lean is because most fatty animal sources of protein bring with them quite a bit of saturated fat, which in excess tends to degrade health to some extent. Excess is the big feature there. We don't want our saturated fat intake to be zero and nothing magical happens if that occurs. It's not poisonous. It's just that in moderation...as a country we're so...or as a modern world we're so good at getting saturated fats damn near everywhere else I think it's a pretty good idea to limit that needless intake of saturated fats from meat consumption. So that's on the protein side.

On the carbohydrate side, the evidence-based was so crystal-clear it's not even really contentious to people outside of really, like I said, ideological grounds. Vegetables, fruits, whole grains, probably in that order are far and away the healthiest sources to get your carbohydrates, of course variety for reasons. One, they come stocked with the most fiber, the most vitamins, the most minerals, and the most phytochemicals, which are independent plant-based compounds that are very small by themselves, very marginally improve your health in a variety of ways. So those are available in great quantities in veggies, fruits and whole grains and pretty much not available in processed grain products. So if you get most of your carbohydrates from those sources, you get all those benefits. You get some secondary benefits where those carbohydrates sources tend to give you a good even keel amount of energy throughout the day. They're very anti-hunger and have anti-hunger properties insofar as they're very filling. They're not very calorically dense. They have lots of water and fiber. If you ventured to overeat on veggies and fruits, [chuckles] good luck. It's impossible. I'm not sure I know anyone ever who got overweight because they had too much of a veggie and fruit tooth, right? But other sources, much more processed sources of carbohydrates, tend to be more problematic. So there are both indirect and direct reasons why veggies, fruit, whole grains, probably in that order, are the healthiest sources of carbohydrate.

And then for fats, the literature on this has been clear for at least a decade now, probably longer. So long as you get enough of essential polyunsaturated fats, omega-6's and 3's, monounsaturated fats are

probably the healthiest kinds of fats to eat in larger quantities, if you choose to eat fats in large quantities. Saturated fats should be limited usually to maybe a third of the fats that you consume, maybe even less, and trans fats are actually technically mild poisons as they accumulate over time and don't do anything good.

So the “big contentious issue” is that saturated fats really aren't unhealthy and there's actually a point to be made there. They're not poisonous by themselves. They don't just destroy your health and zero isn't the optimal number for saturated fats. But if you're consuming lots of saturated fats, the literature is crystal clear on the idea that cardiovascular negatives especially are going to start to present themselves. And it's not one of those things, oh, you know, there's like a conspiracy or but this one literature we found something else. Last I checked, out of the 14 comprehensive literature reviews in meta-analyses ever conducted on fat intake and health, saturated fats were shown to be mild—mild—but net health negative for cardiovascular disease especially in 11 of the 14 literature reviews. I mean, that's really good evidence, man. That's about how science works right there. And just a very good literature review came out on the health effects of coconut oil and, no surprise, it came out that coconut oil in excess is probably unhealthy.

Now, the red meat situation, can you eat red meat as part of a healthy diet? Absolutely, if you keep your saturated fat intake in check and it's within the normal range and not crazy-excessive. And especially if you keep your calories in check and you eat healthy everything else, you can eat a diet almost exclusively getting your protein from red meat and just no one will be able to find anything statistical difference in health between you and anyone else.

So one unfortunate situation in the health sphere, which we're trying to combat with this book, is the attempt to find kind of the zenith of poor health, these little tricks you can make that you can continue to live just the worst life ever and make crappy health choices but if you just avoid these couple of foods you're going to be super-healthy, and people consistently think that red meat, “That's what's doing us in, red meat. That's what's bad.” Like, really? You're going to tell me that some typical Walmart shopper who weighs 400 pounds and eats like 6000 calories a day where they should be eating 3000 for their size, the problem is red meat? That's what's making them obese? Like if they replaced the red meat with just turkey but continued to eat boxes of Oreos like they'd be healthy? [Chuckles] Like that's nonsense, right? So there's a sense of

proportion required here. Can you overeat red meat and thus saturated fat that comes in it? Potentially, but it's very unlikely it's going to be through red meat itself. It's going to have to be through processed meat products and about 10 gallons of ice cream and everything else you can think of.

Danny Lennon:

Right. I think there are a few really important points which we should probably kind of dive into a bit deeper. I think the example of dietary fat and particularly saturated fat is a really important one because I think, as you say, it probably highlights this pendulum swing probably within the last decade of going from a place where people were terrified of dietary fat and being thought that they need to keep it as low as possible or saturated fat as low as possible in order to avoid heart disease, and then we start to see some research coming out saying that it's probably not as kind of the major villain that people thought at least, that some amount of it isn't going to be bad. But then maybe people interpreted that incorrectly thinking, "Well, that gives it a kind of a free pass and then unlimited amounts are going to be healthy," as opposed to kind of really understanding what kind of the literature is pointing to. I mean, we're still kind of the stuff around saturated fats of maybe some specific types of saturated fatty acids are going to be more neutral versus others maybe have a more negative health benefit than others that people really haven't kind of maybe teased out just yet, and even anecdotally, talking to guys like Spencer Nadolsky, for example, seeing patients who maybe have high consumptions of, I don't know, like bulletproof coffee where you have a very concentrated dose of a saturated fat that you're unlikely to consume that specific type in that quantity in a normal food having negative impacts on, say, blood lipids. So, I think, really just kind of goes to show this ability for people to take a movement in one direction of saying this food isn't completely bad but then stretch that too far and say, "Okay, this is now some wonder food and it's going to make everything great if we just have loads of it," right?

Mike Israel:

I mean, I couldn't have put it better myself. That's absolutely correct. People like to think in categorical ways of thinking as opposed to ways of thinking that are more in a spectrum, that are more relative, so people like to hear—and I can understand where they're coming from. People like to hear very clear answers. People like to get very easy heuristics and very easy take-home messages so that they can say, "Okay, this, good. This, bad." And it's actually kind of comical and a little sad at the same time, but I've done quite a few seminars now and in-person speaking engagements and there's at least one person, usually a couple there, who

showed up and they're not that particularly interested in thinking, they're not particularly interested in expanding their kind of computational schema to involve complexity. What they're very interested in is what I would venture to say, but hopefully not insulting anyone, is thoughtless take-home tidbits where they can go, and they literally go, "Okay, so what you're saying is saturated fat, bad, right? Got it." You're like, "No, no, no, that's not what I'm saying." They're like, "Okay, so it's good." No, no, no, no. Like, "So what are you saying?" "Well, they're just not going to fit into good or bad," right?

It's one of those situations, you talk about someone, let's say—I'll make an interesting analogy here—someone in the Finnish army—I believe Finland was allied with Nazi Germany in World War II. Hopefully, I'm not wrong about that. I think they were, right? So someone in the Finnish army fighting on the side of the Nazis in World War II, like is that a good or a bad person? Like that's probably pretty complicated and if they subscribe to Nazi ideology in the fullest in their heart, they're probably kind of a scumbag, but like if they're just doing it because they're in the military and they follow the orders and they'd be killed if they didn't and also they don't actually agree with anything and they just hope the war ends soon, are they bad? Like, no, you know? So it's one of the situations where a lot of the good and bad for food is context-dependent and a lot of it is a spectrum, and this last part I'd really like to talk about.

Everything at some point concentration or intake is a poison. I mean everything, okay? If the space shuttle has too much oxygen in it, people start to get high and then sparkplugs and fuses, if they ever ignite and it's just instant explosion, right? But air keeps us alive. Oxygen is the very fuel or life. There's such a thing as too much oxygen. There's such a thing as too much water. You can literally drown yourself in fluids if you drink water fast enough. So when people say like, "Okay, so is water good or bad?" like it's a really just a wholly irrelevant statement, right? The real question is, "How much water should I be taking in and are there some good take-home signs for what's too much, what's not enough?" and boy, do we have those and we have them in this book. But when people are looking for, "Is that good versus evil?" like, "Oh, so okay, so are saturated fats good or are they bad?" We'll say, "In moderation they're totally fine, but if you take too many of them they start to be bad." I think that's simple enough to be a still worthwhile piece of information and applicable, but it's not so simple as good or bad, you know what I mean? I think a lot of people who are looking for these answers would be a little bit better

served if they just put just a little bit of nuance in their thinking, you know what I mean? We don't everyone to walk around being encyclopedias and start weighing all our food on a scale, but just that understanding of, "Okay, the right amount of this food is like not that much."

It's funny because people know this in very many other parts of their lives and have no problem sort of applying the spectrum approach. Just for example, most people say, okay...you ask an adult, "Is alcohol good or bad?" and they say, "Well, you know, it's kind of bad but like if you have a couple of drinks it's actually okay, might be some health benefits, it's just like if you do too much of it it's bad." You're like, "Okay, well, guess what? That's basically everything about nutrition is the same way." And I think if people do that kind of thinking, which is a little bit more relativistic, it would really be of benefit. But like you said, people are always looking to go too far with an idea and it's, "Okay, oh, saturated fats are magical."

Do you remember like 2009-2010 there was like the hipster bacon craze where everyone was eating bacon with everything and it was kind of like hilarious irony, like, "Oh my God, bacon's so forbidden but it's so good I'm just going to eat a lot of...?" And then afterwards some research came out that saturated fats weren't maybe as bad as we thought and they're like, "See, see? Bacon's great to eat. I love bacon. It's amazing and it's bacon everything," but it's too, too much in both senses of the word.

Danny Lennon:

I think it really ties into kind of a larger piece of trying to communicate good information, which is trying to deliver information in a way that's probably accessible to people but in a way that they're going to actually take something from it but at the same time not give it in such short concise terms where there's not enough context put to it and not enough caveats placed that someone goes away with a wrong idea, and then I think that's maybe perhaps why it's been more of a struggle for people that are coming from I suppose more of a scientific background to try and get that information into the hands of the mainstream who need it, the people who are falling for fad diets or people who are just really good at giving out these bite-sized pieces of maybe inaccurate information but it's something like you could say people can grasp onto it and they don't have to exercise any either critical thinking or thinking about what context this person might be talking about this in. How do you think we could even go about this when we're trying to talk through some of this information to people who maybe don't have that scientific background? Because, I mean, it's very easy I think sometimes when you're talking to a group that

do have some sort of scientific training who are aware of probability and statistics or even just the scientific method and that any statement someone is making they probably know inherently there is some context and caveats to that, but that's not as an obvious thing to people who don't come from a scientific background. So I know for example that you've done a really good job, and especially everyone really at RP have given out information to people that maybe are not all scientists but still in a way that is very evidence-based and is not cutting short on some of the context. So how can people who are maybe listening who are coaches or people who try and pass on this information to others, how can we do that in a way that we're not giving out those tidbits of information that don't really give good context, if that makes sense?

Mike Israetel:

Yeah, totally, it makes a lot of sense. I think you have to start to use relativistic terms and you have to use them well. I know that they're hard to use, it just takes a little getting used to, and the sort of the really anal scientist inside of all of us can not like to use the terms but they're very valuable especially from an economic perspective of the conservation of meaning when the total amount of knowledge is limited. For example, two relativistic terms that I use constantly especially when I teach this material to undergraduates and even more especially when I give very short talks, one example is the term "most of the time." It's a very term, very easy to say, you just add it as an addendum to whatever you think is a good idea to do and that keeps open the idea that you don't have to live your life like a rigid mechanical robot and only eat precise foods at precise times.

So for example, people say, "Okay, so what's healthy food?" and a lot of people cringe when I actually categorize it because they think, "Oh my God, this is breeding eating disorders," and there's no evidence for that but, so I'll say, "Lean proteins, veggies, fruits, whole grains, and mostly healthy fats." And then the next question is, "So we should be eating this stuff?" My answer is, "You should be eating it most of the time." And then that inevitably leads to the question of, "So if I have like a pop tart or a piece of cake here and there, it's not a big deal?" and the answer it's absolutely not a big deal. Does that make sense? So with something like "most of the time," we can say like, "Yeah, just generally you should be eating that stuff maybe 70, 80% of the time, but if you have some other stuff on top then it's not a big deal, right?"

And another modifier or relativistic modifier is, to the concept of priorities, a term like "very important" or "not very important." So I can talk to someone and say, "Look, how much food you eat per day is very

important to your health.” I'm not leaving out anything because I haven't said it's the only thing that matters and I haven't said—because a lot of times people are trying to be overly technical and scientific. They'll say things like, “How much you eat definitely matters,” but they don't leave that person with an impression that it matters a ton, you see what I'm saying? Because they can't overemphasize it because they think, “Oh my God, I'm just going to be this person that people think it's all calories but it's not. I know it's not.” Just say “it's very important.”

When people ask me, “So how important is hydration to health?” I say, “It's not very important,” right? Did I ever say that hydration was totally worthless to look at? Of course not, but I also implied that, “Man, maybe there's some other stuff that very much helps.”

So with those two modifiers, or three so to speak, “very important,” “not very important” and “most of the time,” etc. is I think a very good way to communicate concepts that have a little bit of that complexity to them that we don't need to apply them in exact perfect manner. And I think it's a fear of a lot of people who are scientifically oriented, is that coming out and saying—I've actually received quite a bit of flak myself for categorizing what are healthy foods, and people say like, “Look, you're ridiculous for making these because people are just going to think everything else is evil and they're going to think this healthy food is what you should eat all the time, that you're developing orthorexics.” And I think that like for alcohol, for example, if you come out and say alcohol is pure evil, of course that's wrong, but if you say, “Alcohol is bad for you to consume most of the time,” first of all, all adults understand what you're talking about, most children understand what you're talking about, and it's a completely defensible, very true statement. So when people say like, “Oh, but there's no such thing as junk food. It's all about the context,” okay, give me a context in which junk food all the time is good for your health. I'll wait. There is no such context. I'll give you another context, a context in which junk food just some of the time but healthy food most of the time is beneficial to health. Well, that's 99% of all humans on earth, right?

So it's one of the situations where if you speak statistically, or what I like to call it, relativistically, you can cover a lot of the variants of human populations just with a simple modifier – “most of the time, some of the time, or has a big effect, is important” to diet and health, or a small effect, unimportant. And by couching your sort of propositions in kind of those modifier terms, I think you communicate some real-world stuff because I

think most people can understand, just using alcohol as an example, I mean, very few sane adults think that one drink of alcohol a couple of times a week is bad for you. I mean, almost no one holds that opinion. On the other hand, nobody's really going to say like, "Oh look, if you balance your macros you can just have alcohol all the time and be healthy." Like, that's insane, right? So I think when most adults are told or talk about like, "Well, you know, drinking's okay in moderation, like you just most of the time don't drink and you can drink some of the time," I mean, I think that's a valuable piece of information.

And if we're really unwilling, if we're so unwilling to make any kind of categorical claims that we're saying, "Well, it's..." because you know, some people in the field say, "Well, nutrition is all context-dependent," that's true, but most of us live in the same context. The average Western European or American has a lot of stuff in common. The way they eat is very similar. They overeat saturated fats, they overeat sugars, they overeat calories, they under-engage in activity, they overeat processed foods resulting in those other two factors that are bad, and we can say that, "Look, this is on average what healthy eating is." Is there a possibility that if you're...if you're taking someone who has almost died of malnutrition and now you're prescribing them a hospital diet, is feeding them lots of fiber in the way of fruits, veggies and whole grains a good idea? No, of course not. Their digestive tract's not ready for that kind of thing. They need the IV'd fluids first and then they need tube feeding and then they need soft foods, etc. Yes, it looks different for them, but we didn't write this book and most health advice isn't for those people. It's for people engaging a relatively average food behavior and there it's very meaningful to say that most of your carbohydrates should come from fruits, veggies and whole grains, and I think that covers a lot of variance and it really is an informative thing to say and it helps.

Danny Lennon: Yeah, I think that's a really important point because so often, especially within the evidence-based fitness community that we're in, some people almost get paralyzed into not really giving any advice to people because...

Mike Israetel: Yup.

Danny Lennon: ...they're kind of almost scared to say anything that someone else might pick up and say, "Well, actually, that doesn't count for this scenario," or "This doesn't account for this context," and it ends up with them just spinning their wheels and not really giving any kind of piece of advice. And then similarly, people will try and think that they've found the

solution and if you tell someone, for example, that dieting is a restrictive process and dieting is going to be hard, some people get very frustrated and say, “Oh no, if you just count your macros you can eat all sorts of types of treat foods and it's going to be a breeze,” and it's just...

Mike Israetel: Oh my God.

Danny Lennon: ...well, that's not really the case, right? [Chuckles]

Mike Israetel: Don't get me started on that. You know, that could very well be the case, but if you don't understand that...if counting every fucking macronutrient doesn't seem restrictive to you, you've fucking gone insane. You need to check yourself into the fucking insane asylum.

Danny Lennon: [Chuckles] Exactly.

Mike Israetel: I had extremely long discussions that were extremely unfruitful with some particular individuals who were basically like what you're talking about with clean eating and all this stupid bullshit is orthorexia, and these are people that put into my MyFitnessPal 49 versus 51 grams of protein at this meal. You're out of fucking mind, okay? If you really think there should be no restriction, I will tell you, there is a group people in this world who eat with no restriction whatsoever, the modern, overweight, American/Western European. They're really in bad shape. They die much sooner than you would expect. They have a ton of health problems. How did they get there? Eating whatever the hell they wanted, okay?

So if people say, “Ooh, you really don't want to preach a message of restriction,” they have a point. Maybe you don't want to come at it talking about restrictions first but suggestions first, right? So for example, you might not want to say, “Don't eat junk food. Really limit junk food.” What you could say instead is, “Try to make most of your foods based on whole grains, fruits, veggies, lean meats, healthy fats.” It's kind of saying the same thing but you're coming at it from an inclusive standpoint versus an exclusive standpoint. However, if you are looking for a diet that enhances your health or body composition or anything and you are allergic to the concept of restrictions, you're never going to achieve anything because there is no unrestricted diet. Your body's really good at maintaining homeostasis. If you're overweight, you're going to have to restrict something in order to lose weight, period. And the people that are just scared of talking about that, I think a lot of those people bring their own unfortunate histories of disordered eating into the equation and don't really speak for most people.

Danny Lennon: Yeah, for sure. I mean, there are so many cases we could point to that I'm sure you've seen where people start talking about things like orthorexia and that being driven by people thinking of clean eating when really they move away from that and just substitute for essentially another form of orthorexia or another form of an eating disorder by zoning in on being very restrictive in other ways. And not to say people can't do it successfully, but people are kind of missing the point of what they're trying to do, I think.

Mike Israetel: Well, you know, that absolutely occurs. What used to occur a lot especially when I came up through school, there was an unfortunate, I don't want to say faction, but there was a lot of attention being paid to females and eating disorders and female health, and a lot of the people that came into the, not the research but the academic side especially in the women's study side of things, they were so focused on the psychological aspect of disordered eating their nutritional recommendations that they ended coming up with for healthy eating pretty much made no sense because they were completely nonrestrictive. And when you talked about, "Well, hold on. Now, these are totally unrestrictive and they're not going to result in any kind of health enhancement," they would say, "Well, you know, restrictions are bad," and you say, "Oh, geez, you know, from a psychological perspective for people recovering from serious eating disorders, yes, totally agreed." But these people were giving advice to individuals, like you might have seen some of those in women's fitness magazines like, "Don't worry about this and that, eat when you're hungry." I'm sure you've seen that before, like, "Let your body tell you what you want it to eat." Let your body tell you what you want it to eat? Are you out of your fucking mind? If I did that shit, I would be eating Oreos and paint off the wall, who the fuck knows what else.

Like you sound this idea of calm, logical informed choices that, yes, involve some restriction. If you're allergic to the process of restriction altogether, you're allergic to the process of enhancement of your health and enhancement of your body composition—there's no other way to say that—there are good and bad ways to approach restriction, absolutely. And if you've been too restricted, you may need a considerable break, several months if not more, altogether from restrictions. But I think the big assumption that's wrong is when people say like, "Oh my God, restrictions are really bad." It is for them because they've really been burned by it. But for most people, they're pretty ready for a little bit of restriction and as long as it's logical and sound and approached phasically where every now

and again they get a chance to relax from restriction, it's sustainable for a fairly long time.

Just a quick example. After a bodybuilding show or after a really hard cutting diet, if you come up to that person and say, "Hey, what do you think about like dieting and restricting?" They'd be like, "Aaahh! I can't do it. There's no way. It's terrible. I want to eat everything." But most people didn't just finish a bodybuilding show. They didn't just deny themselves the food they wanted for 16 weeks straight. They've been eating whatever and they're not even into food anymore. They're just like, "Yeah, I just eat stuff." And you're like, "How about you try to eat more whole grains and lean meats?" And they go, "Okay," and they try it and they lose a bunch of weight and they get much healthier. And you ask them, "Do you feel really restricted?" and they say, "No." And so I think a big part of this anti-restriction kind of allergy is like people who have really been burned by it and they kind of assume everyone else has been burned by it too.

I was discussing this on social media with a gentleman who was this really...he makes very good points but he really went after my use of the term "junk food." He's like, "Don't you understand what you're doing by using the term junk food? You're literally labeling it as bad." Okay, to me this was not controversial. You're allowed to label things as bad because they're mostly bad, you know? Like you can do a variety of things that are considered "bad," but in certain amounts they're understood as there are some things you do in life that are bad, you know what I mean? Like alcohol is just a perfect example. Everyone knows you're not supposed to drink too much. So we can say "alcohol is bad for you" and be pretty much correct. But if you just drink a little bit of it, it's not a big deal. I don't see people having really big issues with alcohol because of that misunderstanding, right? "Someone told me alcohol is bad, so I had to prove them wrong by getting drunk all the time." Like, no. Good God, no, right? So I think something like junk food, how many people really have a problem with the term "junk?" How many people really have a psychological hang-up and when you call something junk, they go, "Oh my God, that means they never have to it?" No, people really understand that you can eat a little bit of it in moderation especially if you teach them that. So a lot of this really resistance to these kind of categories of good/bad or better/worse is mostly by people who I think have been scarred themselves and they're still in the process of recovery.

Danny Lennon: Yeah, and I think it really a lot of the time comes down to people trying to be almost like have these super-accurate definitions of everything that can

never be challenged because when people get so worked up about someone for example using the term “junk food,” you've got to consider like how many people in the real world are they working with and actually helping on their diet because if the average person comes to you looking for advice, guess what? They're going to use that term “junk food,” and everyone knows what they mean when they say that, right? No one's getting confused over what foods they're talking about.

Mike Israetel: Yes. No.

Danny Lennon: And so instead of listing them all out, now there's just this little phrase that, yeah, for some people it might kind of throw up a bad connotation or whatever but really people know what that food is. And I think probably where I think this kind of always leads me to start thinking about is really this whole area of non-homeostatic eating or behaviors and habits and our food environment because, really, they're the things that are driving people to over-consume. And so going back to your point of people are averse to restriction, they're not thinking about the modern world we live in, right? If we just think of our modern food environment and just the world we live in, like the default right now would probably be for people to become overweight and sick just because, like you say, if we let our brains kind of decide all our decisions, that's the way we'd be geared to go because there's so much things that we can easily seek out and so much hyperpalatable food that's so easy and cheap to consume. And so to at least some degree, and that could be tracking calories or it could be just being mindful of what food choice we make or having portion control, whatever, there's some degree of restriction going on just to be healthy, and then almost the default in this kind of modern day and age is becoming overweight and sick because of really when people over-consume and eat so much and become overweight, it's not really down to the always feeling hungry per se or having a huge energy demand, it's more so because of the kind of lifestyle factors and the setting they're in and the food environment or the people they hang out with and the kind of general habits they have that drive the over-consumption of those hyperpalatable foods, right?

Mike Israetel: Absolutely. That's absolutely the case. I'll make one addendum. If you have a problem with the idea of restriction, you're not thinking like an adult. One of the seminal but one of the critical differentiating factors between the thinking behavior of an adult versus the thinking behavior of a child, and this is a transition we see so predictably during the teenage years but there are formal standardized tests to assess how well you're

doing on this transition, is the ability to delay gratification and the ability to self-restrict instinctual and impulsive choices. If you have a really big problem with self-restriction, you have a problem with adulthood and I can't put that any other way. Some people think that in the ideal world you can live free without any restriction whatsoever. I point those people to the bad impulses we all have to do things that are absolutely not cool, okay? For those of us that are jacked and strong and can beat people up, if we really didn't believe in restricting ourselves from things we wanted to do, I mean, my God, my students wouldn't be safe in my classroom. You turned in a paper late, watch this, single leg, boom, that's it, right? I mean, that's what I feel like doing. And when you're driving through traffic and someone cuts you off, you feel like hurting them. You really do! And the people that say they don't are fucking liars, right?

Danny Lennon: Right.

Mike Israetel: That's two categories of people. So in every waking moment of your adult life, you have to restrict yourself to some extent. Children don't restrict themselves. That's why statistically speaking, if they have the physical offensive weaponry to do so, 2-year-olds are the most violent group of people on earth. I'm not sure if you knew this, but 2-year-olds respond to...they take what they want and if a resistance is presented they literally actively fight through the resistance. So when people say like, "I'm into like controlling...I don't like restrictive diet plans," you might as well replace that with speed limits, mores and social norms on violence, you can replace it with anything and it's just as ridiculous.

Now, luckily, when people just eat themselves into a poor health, they don't hurt anyone else. So it's a hell of a lot better if they just don't think diet should be restrictive versus if they don't think personal violence should be restricted, right? At least they're just hurting themselves. But it's just as simpleminded and it's just as wrong of attitude.

So if you're coming at healthy eating with a perspective of like, "Well, I don't really want to restrict myself," hey, listen, I agree with you. Let's try to find a way to eat healthy where the restriction is minimal and the benefit is maximal. But if you are really, and I mean this, allergic to the concept of restriction, like, "No, no, no, I can't restrict myself at all," You need to talk to someone about that and a professional, and I do not mean that in an insulting way. I mean that in the most compassionate way I can. That kind of allergy to restriction altogether is something to work through

with a counseling psychologist who is an expert in food addiction and that kind of behavior.

Danny Lennon: Yeah, for sure. I mean, it's this really...every decision is going to be some sort of tradeoff and there's always going to be a downside to whatever...some decision someone makes. I mean, the big kind of one I always laugh at and we see from time to time, people asking about how they can go on a diet and lose a bunch of weight but they don't want to do it in a way that they're going to ever feel hungry. And it's like, to a certain degree, yeah, you can do a lot of things to mitigate hunger and you can set it up in a smarter way that you're not so starving all the time that you can probably still make progress at a decent rate, but to some degree essentially what dieting is under-eating what your body wants to eat, right? So to try and do that and not accept there's going to be same tradeoff is kind of just missing the whole idea of what you're actually doing and what actual dieting is. So I think it's, yeah, just being I suppose a grownup about it, as you put it.

Before we kind of get to the final question or two, what are the kind of main takeaways you would present to people about essentially what you've put into the book if it's easy to distill down into some things that you want people to be aware of or really that this book has tried to tackle and the main focus of what you've tried to address with the book and what people might be getting themselves in for if they do go on to purchase?

Mike Israetel: Yeah, you bet. So just a couple of quick tips. Your body weight matters greatly to your health. It matters more than anything else with regard to nutrition. So if you're at a healthy weight or on your way to a healthy weight, you're doing really well. The way to do that is calorie balance.

Secondly, when you're eating, eat of most your foods as healthy foods – lean meats or lean vegetarian or vegan products, fruits, veggies, whole grains, healthy fats. If you eat most of that food, maybe 70%, you can fill up the rest of your calories with junk food of the worst possible kinds of and it's going to make no difference to health. Junk food, sugar, candy, cake, ice cream are by no means poisonous. Some people avoid them altogether because they think it just comes from evil. If most of your food is healthy, you can eat plenty of unhealthy food as long. As your calories are in order, they literally won't be able to find any difference, effect on your health.

A big point after that—so that's most of dieting, is being at a healthy weight, eating mostly healthy foods. One thing I do want to say that we didn't get a chance to cover but I think is really important, try to stay away from all or nothing dogmas particularly as regards macronutrient amounts. There are groups of people that say, “Listen, if you don't eat high protein, like you're going to be in bad health,” and a lot of lifters fall into this, right? Because we all eat high-protein diets and we think everyone else should too for whatever damn reason. So you look at like a vegan or something and they're eating, like you look at their plate, and they're eating like cucumbers and celery, a little bit peanut butter and some quinoa, and you go like, “Oh my God, they're not eating protein,” like, “Oh man, they're going to be in such poor health.” The reality is that if you eat a very minimal amount of protein enough to keep you alive and healthy, which is a very, very small amount, maybe a third of what it takes to get the most jacked you can, you can eat all the rest of your calories from carbs and fats and be just as healthy as someone who eats a high-protein diet.

On the other hand, you get people in both directions, a lot of vegans, vegetarians and stuff, they think that grains and carbs are just a fruit of life and they think that if you lower carbs you're just going to be in very poor health, and there's just as many people on the other side saying carbohydrates are killing the world and everyone needs to be low-carb and that's the only way to go. Both groups are correct and wrong. They're correct in the fact that their own ways are absolutely conducive to health so long as they meet a minimum of carbohydrates, proteins and fats, but there's no reason to be one or the other. There's everything in between and both extremes work.

And lastly, fats, if someone eats a diet mostly of fats but they're mostly healthy fats, and if their calories are in order, then they're really off to really good health. There's some literature now about high-fat, low-carb diets which for health looks just as good as a vegan and vegetarian, which are super-high-carb, would look just as good as kind of more bodybuilder diets which are super-high-protein.

So as long as you meet the minimums of macros, there's a huge diversity of macronutrient profiles you can eat be healthy. And I think that right there is kind of a small part of the book that really I don't think it changes the game, but what I really think it does is it really puts into perspective how much useless, pointless dogma we've put in for so long into trying to manipulate macronutrient amounts to get the most out of our health and

it's something that as long as you meet the minimum it doesn't matter and thus we've just been wasting our time with it.

You know, it's funny because one of the critiques against the USDA food guide pyramid, the original one, is, "Look at all these carbs that they have in there." Well, most people who eat lots of whole grains and fruits and veggies like vegans and vegetarians, vegans actually, some have been studied to take in up to 80% of their daily calories in carbs, a lot of which includes sugar, and they're so healthy they outlive damn near everyone else, right? There are only a couple of groups of people that can outlive them and have low disease rates.

So when you're saying something like, "Carbs are bad," I mean, you can't be serious. You can't be serious because you're just totally unaware that vegans pretty much eat only carbs and they're totally fine. So I think one of the great things about this book, not just that it presents this priority structure but also that it's got some really silver lining to it, and the silver lining to it is there are so many different pathways to health as long as your calories and as long as you're consuming mostly healthy foods, you can eat a lot of different kinds of foods and be A-OK and there's no need almost ever to be crazy-restrictive.

So one thing I'd just like to leave off on in the summary, and we have a huge section of myths and fads at the end of the book which is I think really interesting, but one of the biggest myths is the search for magic pro-health foods and the search for these bad poison foods and this one food, you know like the stupid click-bait articles that like, "These five foods lead to belly fat?" And whoever the fuck does that I want to hire a sniper to make sure they stop doing that, but you know, just have a clean shot 500 meters out. I'm not asking for much. So it's just that kind of thinking. And people say like, "Well, what do you think about like...like I heard," like insert random food here, "Like I heard oranges were bad." Like literally someone's now telling me that brown rice is bad because it has fucking arsenic in it or some shit like that. Like are you out of your mind? You'd have to eat more brown rice than your body weight per day to get enough arsenic to do anything. Apples have cyanide in it and people were talking about that in the nineties but I guess they kind of forgot. People are looking for these bad foods that this one food is just really bad for your health and it's a no-go but as soon as you stop eating it that's going to be good, or this one food group, carbohydrates, that's what's bad. Some vegans and vegetarians think proteins are really bad. Traditionally, people

think fats are really bad. That's just not true. So as long as you're looking for it, you are missing the reality, period.

Danny Lennon: Yeah, I think that's such an important, is rather than looking for stuff to take out or to what extreme we need to bring things that are healthy, it's more so to think of it almost like a checklist of “here are the things we know will impart a health benefit” and to tick those off, and then whatever is left in someone’s overall intake you can kind of fit other stuff around it as opposed to trying to find these things and push it to the extreme.

Mike Israetel: Absolutely.

Danny Lennon: And I think one kind of phrase I've tried to use with people to kind of bring up a similar issue is kind of talk in terms of principles versus methods, right? So, exactly the point you were just making that we've had all these different groups use all these different specific methods and ways of eating and we know people who have been successful on that and we know people who have failed on those, so it's not really the specific method that people need to zero in on, it's like, what are the principles behind each and how to me?

Mike Israetel: Yes.

Danny Lennon: And I think that's a great thing of what you've done with this hierarchy because that's what...it lays the blueprint for people to do that. “Okay, here's the stuff to focus on, now use that in whatever direction that is useful to you as opposed to thinking you need to fall into one of these specific methods that some group is touting to you.”

Mike Israetel: Yup. And you know what? One of the ways that you can look at this in an alternate way is we look at all the people that are really healthy and the way they eat, we can ask, “What do they have in common and what do they not have in common?” right? So vegans and vegetarians, high-protein-feeding bodybuilders and fitness people, and high-fat/low-carb/low-protein people are all incredibly healthy. It probably can't be any of those things then that make them healthy. But let me ask another question: How many that eat most of their diet in junk food are very healthy? Ooh, now we're talking about a much smaller number of people. Now, to bring the point home: How many people overeat on junk food and are still healthy? Now we're getting at the principles. Food composition – you can't get away with eating all junk food. It's unlikely. You can sometimes though, if you're lean enough and small enough because your calorie balance is still in order, now we violate calorie balance to see what

kind of groups of people we're left with. So if you think that vegans and vegetarians are crazy and that everyone should eat a whole lot of protein, we're going to zoom in on vegans and vegetarians and find literally millions of healthy people. Now we ask you to do the opposite: Violate the principles and see how many people you end up with. Show me millions of healthy people that are eating way too many calories, that are grossly overweight, and that eat mostly junk food. Where the hell are these people? They don't exist. There are like a couple of super-lucky genetic variants every now and again who weigh 300 pounds and have incredible blood pressure and glucose dynamics and they eat just total crap all the time, but they're very rare. Most vegans and vegetarians are in very good health. And that's one of those things, I guess – concept. It's the principles that matter. And the way we find out that they matter? First of all, the people following them are in good health. Second of all, the people violating them, the bigger ones they violate the less of them they find that are in good health.

Danny Lennon: Yeah, for sure. And I think that just a final point before we do wrap up that just reminded me of is people trying to maybe pull apart these different factors and think of them as mutually exclusive as opposed to realizing that the If It Fits Your Macros person that's telling you about, “Well, actually you can just eat all your food from junk food and it's going to be fine,” are not realizing, “Well, for a lot of people especially within the general population, the more ‘junk food’ they're consuming the much more likely it is that they're going to just over-consume because it's much more harder for them to be able to control that overall caloric intake, right?”

Mike Israetel: Absolutely. Absolutely.

Danny Lennon: So I think seeing that kind of tradeoff between those or the not being mutually exclusive at least is important.

Mike Israetel: Absolutely.

Danny Lennon: Mike, where can people track your work down online? Where can they find more information about it and any of the stuff you've got going on that you want to highlight to people?

Mike Israetel: RenaissancePeriodization.com, Instagram@rpstrength, give us a follow. We post a lot of pictures, cool videos and stuff like that, a lot of information. I'm @rpdotormike on Instagram. You can just mostly find half-naked pictures of me and my food because I believe that's what

Instagram's really for. And then, I post a lot of informational content - training videos, diet tips, etc. some through Instagram but a lot of it through Facebook, so Mike Israetel on Facebook. It's a public account. Come, follow, troll, give me shit, it'll be fun. We'll all have a good time.

Danny Lennon: [Chuckles] Perfect. And with that, Mike, we come to the final question we'll end the show on and it can be to do with any topic even outside of what we've discussed today, and it's simply if you could advise people to do one thing each and every day that would improve their life in some aspect in any type of area, what would that one thing be?

Mike Israetel: Try to give things that are important in your life a good measure of calm rational thinking. If health is really important to you, give some thought, maybe some reading, to concepts in general health and diet and physical fitness. For really important situations, thinking about them is good. You might now want to propose marriage to someone if you haven't thought through, "Is it a good idea to marry this person?" You might not want to propose marriage to a diet if you didn't think about how it was going to affect your health. I find that people sometimes make really rash decisions on really important things and I don't really think that's a good idea, to put it mildly. If you're really interested in your health, don't just do a diet your coworker's doing at work. Try to research it a little bit. Try to look into it. Give it some thought, maybe read a book or two, and then make a decision. I think that more thinking, more calm reasoning, usually helps most situations.

Danny Lennon: Perfect. Great answer and a good way to finish off the episode. Mike, thanks so much for not only the information and the work you're doing but for like giving up your time today to come on. Thanks so much.

Mike Israetel: Thank you so much for having me.

Danny Lennon: So that was the awesome Dr. Mike Israetel. Remember, you can check the show notes out to this episode at SigmaNutrition.com/episode149 to get links to anything that we might have brought up today. A transcript of the episode is also available for those of you who are not on the transcript list. That will be a link in the show notes there as well.

And then, remember, if you want to get on the VIP list for the Sigma Weight-Cutting System, then just go to SigmaNutrition.com/weightcut, or if you just simply are on the website you will see a tab at the top that just says Weight-Cutting and you can find more information there as well as in some of the other tabs you'll find how you can get hold of a Sigma

Nutrition and Performance T-shirt or you can even go and look at our online coaching process potentially if you want to work with one of our coaches here.

So we'll have another episode later on in the week in more kind of shorter format where we're going to dig into a specific topic again and that'll be out later this week, so make sure you are subscribed to the podcast if you're not already and keep an eye out for the episode. And until then, thank you so much again for listening and I hope you took tremendous value from today's episode. Thanks.