DANNY LENNON:	So let's not waste anymore time. Let's get straight into this week's discussion with Marty Kendall. Marty welcome to the podcast.
MARTY KENDALL:	Thank you Danny. Pleasure to be here mate.
DANNY LENNON:	Yeah, like I was just mentioning to you before we're hit recorder. I'm really, really looking forward to this, because I've been intrigued as I've read through the work you've put out both on the blog, and also through social media and just the way you've approached nutrition and essentially this framework that you've build for people to start thinking about their nutrition a bit more detail and a way for them to piece through some things. I've got lots of questions about that, but before we get to that maybe a good place to start is for listeners who maybe haven't came across you or your work before, introduce them to your work and really what has driven you to start putting this stuff out?
MARTY KENDALL:	Yeah, as a lot of these people get into these things I've got a personal history diabetes and obesity and just both generations of my family have helped me to look

at them and say, "Well, I need to do something to manage the situation to avoid diabetes or Alzheimer's," or whatever, but probably more personally my wife has type-1 diabetes. So I suppose living with someone who is constantly measuring their blood sugars and seeing how the foods that they ate influences the blood sugar reaction, and how they feel, and the energy levels and the radical impact that it can have. I've just made a real and as for as the personal quest and so eventually came across the insulin load off the gun through low carb and going through the headspace with Robb Wolf and Paleo World and getting ahead on nutrient density I stumbled across the start up of the insulin load measured by the University of Sydney where they basically measured the insulin response to the whole range of different foods, they don't just measure the blood sugar response which is the GI but the insulin response. So this then enables us to quantify how much someone with type-1 diabetes needs to dose with the food. So that's really radical and Dr. Bernstein talks about – who is a diabetes expert, talks about the Law of Small Numbers and we want for someone with diabetes to have manageable small amounts of insulin and to do that you need manageable small amount of insulin load in your food. So that took me on a journey of just sharing that online and on social media and starting a blog Optimizing Nutrition, and met a whole lot of people and just continually realized the one size doesn't fit all and there's a lot of people who are in that diabetes camp, all the bodybuilding, and all the evidence based nutrition, all the hardcore therapeutic keto or the plant based, and now there's like carnivore and just kind of what are the common elements of all these different parameters, and being an engineer by day the question is how can I systematize that, how can I take out the key elements and turn them into a system that works not just for someone with type-1 diabetes but someone maybe who's trying to lose fat and gain muscle like from Ketogains or someone who isn't wed

to a low carb concept, what are all the common elements and how can we manipulate those numerically to get a better more targeted approach to nutrition.

DANNY LENNON: Yeah. I think that's what's shines through a lot in the work that you put out, and like I mentioned previously it is a nice framework that – there's obviously many layers to, I think the first surface layer that people are probably met with when they come to your site is going to be related to essentially that these three main variables for people to bear in mind around energy density, nutrient density, and insulin load as you mentioned. We're going to dig into each of those I'm sure over the course of this podcast, but just to get started can you maybe mention to people the nutrient optimizer that you've created itself because I think it's fantastic. The thinking that's gone into it and really what it is, what it does, and how you've essentially have built this thing out?

MARTY KENDALL: So as I said the three elements of the system being insulin load, nutrient density, and energy density. And as you've gone across some with a lot of people on the podcasts that the central thing that works with whole diets is to remove the garbage food, the hyper-palatable, the hyper-processed food and you replace it with foods that contain nutrients. So the nutrient density concept is essential to that and there's been a number of people approach that from different angles. Joel Fuhrman approached it from more of a plant-based looking at vitamins and minerals and a bunch of other esoteric elements, and then Mat LaLonde came along and tried to quantify and looked at all the essential nutrients. But what I found Mat's approach does – because proteins are really easy to find in the system you end up with really, really, really high protein foods and everybody really loves it. He came up with bacon and beef as the number-1. I think what you need to do is not just prioritize all the essential nutrients, but just the ones that in your current diet you're not getting enough of. So what the nutrient

optimizer does first and foremost is it says what's your current diet, let's look at the nutrients you're getting from the foods you're current eating based on either your food preference be it a low carb or paleo or whatever or actually you can upload your cornometer data. Cornometer will give you the micro-nutrient output, and then you can say well which foods will then re-balance your nutrient profile to give you more magnesium, potassium, vitamin-B, vitamin-K or whatever you're currently missing from your diet. So there's basically a unique micro-nutrient fingerprint for each person which identifies maybe the cluster of 10 nutrients you're not getting enough of, then you can identify the foods that give you those nutrients to progressively, like rudder on a ship, re-balance your food and re-prioritize your direction and progressively re-train someone. But it's not just nutrient density because if you just focus on nutrient density it's a really best way of proteins sparing modified fast there's a lot of nutrients in – that's perfect for a lot of people, especially people trying to cut weight in the bodybuilding community but for someone trying to manage diabetes maybe a lower insulin load, higher fat approach might work or someone who is really trying to cut weight might want to minimize the energy density or someone who is an endurance athlete might want to maximize the energy density. So you've got these three parameters and from an engineering multi-criteria analysis sort of approach we can manipulate each of those parameters to suite different goals. So no longer you have to have one size fits all it's like who are you, what are your goals, what's your current context, what you're currently eating and let's progressively train you to improve your nutrition from the ground-up from a micro-nutrient basis.

DANNY LENNON: Yeah, I really like a lot of that and I think one of the first things – it's probably been mentioned a number of times on the podcast before that I think really the whole nutrition world needs to do when we're having

more appropriate conversations is to, first of all, move the conversation away from exclusively being a macro-nutrient focused thing. And of course, macro-nutrients have their place and that's super important to look at for its effects on health and body composition, but just looking at that is this kind of surface level and as you've pointed out a number of times when we're looking at the overall health fullness of a diet, looking at the micro nutrition is obviously going to play a large role there. One thing that you've just kind of alluded to there that I think is worth coming back to is looking at how the type of diet varies based on the person's context of what the type of diet that we suggest to someone as in like you mentioned if we just have this one thing of looking at nutrient density that may or may not give someone the best diet, even if it has the most nutrients in it from a micro-nutrient perspective may not even be the best for this particular person. So, can you maybe go into a bit more depth as to how we may need to make compromises on the nutrient density side to allow for other aspects for certain people's context?

MARTY KENDALL: Yeah, so I suppose for example a really high micro-nutrient density approach a lot of the times people are missing those essential minerals like magnesium, potassium, calcium, vitamin-D those of things that are harder to get from the diet and the foods that provide those you know liver, broccoli, I eat a lot of spinach, a lot of seafood, lot of mussels, and oysters and those sort of things but if you say hey, bodybuilder who is trying to bulk or mister tri-athlete who's trying to run 10 hours on stretch eat broccoli it's just not going to cut it. So that's where the energy density comes in and say okay we know nutrient density is important but you need more energy, you need to get more energy in so let's ramp up that energy density. And energy density, nutrient density have been talked about before but to my knowledge they haven't been brought together in a framework and by the same parameter someone who is trying to lose weight and use their

own body fat they might decrease the energy density so that the more body fat comes from the body, but then at the other end you've got someone who's looking for a therapeutic ketogenic approach and that's a valid approach for someone looking to manage cancer, epilepsy or Alzheimer's and dementia on those sort of conditions there's really exciting promise there but if they just ramp up the nutrition to 80% fat thinking only of micro-nutrients they end up missing out a lot of micro-nutrients. So even at 80% fat we can say well let's tweak the diet a little bit to make sure at that extreme yes it's hard to get micro-nutrients in at 80% fat but let's do our best at that point. But I think for most people who are somewhat insulin resistant you can get quite a nice balance sort of balancing the insulin load and nutrient density at the same time, and then there's a lot of argument around insulin isn't the be-all and end-all secret for everybody and that's true for a lot of people who are probably listening now, your audience, the evidence based nutrition crowd insulin isn't really an issue as far as weight loss and it comes down to managing the energy density, so yeah different strokes to different folks.

DANNY LENNON: Yeah, and I think there's a few things to get into from that point. I think one is that, I'm sure most people listening are kind of very familiar that when we first talk about say a true nutrient deficiency that's kind of obvious when we think of populations who just don't have access to enough good quality food or just food period, when we're thinking of kind of the western world I suppose the first group that make sense where people may true nutrient deficiencies is people who just have like a flat out terrible diet like most of it is junk food, they're not paying attention to eating any good quality food and it kind of makes intuitive sense for people. One of more interesting maybe sub-group to look at and maybe probably relates to more of the people listening to this is if we take people who let's say generally try and be conscious about their food

"Eat healthily" and trying to eat a variety of foods is there or to what extent is it still likely they maybe suboptimal on certain number of micro-nutrients at least from what you've seen and if there is still clear cases where people are going to be suboptimal on intakes regardless of a general healthy diet, are there a few common problematic nutrients that tend to be more of an issue for people within that let's say broad term of eating healthily already?

MARTY KENDALL:

Yeah, I suppose the first thought there is that the great thing about approaching it from a nutrient density point of view is that rather than arguing about the my plate and you've got so many conflicts of interest in this health, and nutrition, and food and people are trying to sell you their food based on however they argue with the government that their approach is the right way, this just says let's look at the micro-nutrients and it effectively eliminates a lot of those processed sugars, highly processed carbohydrates, highly processed grains, really, really high fat with minimal micro-nutrients those things are off the table and then you get to focus on let's look at fairly nutritious healthy foods. A lot of the time in the low carb, particularly which I've done a lot of analysis on in that scene people tend to be deficient in magnesium, potassium, vitamin-D those of nutrients and it sort of re-balances them back to focus on let's eat a little bit more seafood, let's eat a little bit more green veg and bring those minerals in. So a lot of people early on in their keto journey or low carb journey end up getting keto flu and it's those calcium, magnesium, potassium minerals that are missing from their diet and if the nutrient optimizer approach helps them to identify the supplements, they need other foods, they need to fill those gaps. From a really high protein point of view like over 60% protein you start to rely on really processed foods, and you also tend to drop out those micro-nutrients. And then when you're looking at plant-based it becomes more interesting and you start to not be able to get enough

vitamin-A, D, iron some of those things that are less bio-available. So, that's where things get a little bit more interesting and I'm digging in a little bit more looking at bioavailability and the context of glucose demand in maybe a purely animal-based diet. So, that's where things get really interesting is testing these things at the macro-nutrient extremes, and also the plant-based versus animal-based extremes to make sure the system works.

DANNY LENNON: Yeah, so with that is there any particular interesting findings that you came across when you started putting some of these typical dietary approaches into the optimizer, and maybe not even interesting based on what you would have guessed but interesting to most people who think about these different types of dietary approaches, is there any ones that they may think the average of the results of a particular dietary approaches maybe a bit surprising to them?

MARTY KENDALL: Yeah, I suppose with the low carb like I mentioned it's those nutrients that are associated with the keto flu; the magnesium, potassium, calcium, vitamin-D that are harder to get from a very low carbohydrate approach and that's where finding the balance between minimizing your carbohydrates to stabilize your blood sugars versus maximizing the micro-nutrients as much as possible. And then at the other end like I mentioned the plant-based type diet has a massive amount of micro-nutrients per calorie but then you have think okay vitamin-E, D, iron, omega-3, B12 aren't going to be as bio-available. So, a lot of the time it's interesting that the nutrient optimizer just a lot of the time gives you that common sense answers, okay a nutrient dense diet is a mixed diet of animal food, seafood, veggies that it gives you a broad range. But if you have preferences then it can help you identify the foods within those niches that you want to focus on there. So, often it's just common sense but common sense isn't that common and this is an approach that continues to train your diet to continually improve. And you've talked about micro-

nutrient deficiencies and as far as what's the goal here is it just meeting the recommended daily intake or if you're really trying to optimize nutrition is it better to get 200% – a lot of the time most people don't get a 100% in 3, or 4, or 5 but then once you've hit the 100% in from whole foods, in all your micro-nutrients then you can say okay what's my goal here? Do I want to continue to ramp up nutrient density. It's been amazing for me to follow this journey and few other people, as you say, well how can I design the most nutrient dense diet, you know I'm not hungry, I'm losing weight and I feel great and maybe the 100% isn't the be-all and end-all and how do you continue to improve that while also meeting your other goals be it to gain muscle or to get enough energy in at the same time.

DANNY LENNON: Yeah, it's super interesting. I think one of the – from a very practical perspective that I like about this is once you've ran someone's typical intake through this and it highlights a couple of key nutrients rather than them having to worry about every specific thing it's like okay here is a few areas where the lowest hanging fruit let's try and move the needle on some of these issues that are nutrients that we know are going to be particularly low, here are some common foods that are going to have a certain amount let's focus on that. And while that I think obviously is going to impart health benefit in-of-itself I think from someone trying to improve their diet, particularly if it's in the case of someone who is trying to lose weight over time it's a really nice way of getting to think about what they can add to their diet as opposed to what they can take away, because that's one of huge things we see, right? So, there's huge theme across different approaches of you need to cut these out of your diet, right? These are bad foods, these are things you need to avoid or these are bad micro-nutrients or whatever the case maybe or you just need to eat less food. It's quite a restrictive point and to some degree we have to be restrictive, but it's the messaging can be quite; here's all the things

you might take out in order to be healthy or I think this allows you to foot the switch and say to someone okay in order to be healthy here's all the things you should be adding, here's foods to start adding into the diet, and let's see if we can move this. Have you found that with people who have kind of gone through that approach?

MARTY KENDALL: Yeah, you've hit on the really exciting aspect of this and I've set up a leader-board with the nutrient optimizer score and people competing with other people and with themselves to continue to improve the quality of the nutrition. I mean calories and macros are still important, but if you're focusing on micro-nutrients improving your overall diet quality then they become less important and like I've sent you a draft article looking at the minimum effective dose and the minimum effective dose of nutrition, you need a minimum amount of protein and the nutrient optimizer highlights that that's probably higher for most people than normal and sort of a window of micro-nutrient ranges that will give you sort of guidelines and guardrails to stick within and you can focus on calories as well. But if you're focusing primarily on micro-nutrients then all those things become much less important and I think calories and macros are useful, but only – it's just like yeah I'm in the right range, but let's continue to focus primarily on micro-nutrients and yeah everything else becomes nearly irrelevant definitely still relevant but it becomes less significant once you've dialed in your micro-nutrients and continue to go down that journey of improving the micro-nutrient profile and its sufficiency.

DANNY LENNON: Yeah, and I'm so glad that you bring up the concept of the minimum effective dose that you've been writing about for nutrition and I really enjoyed reading that piece and I think to kind of tag onto what we discussed there from the maybe first time people hear about oh we can now get an app and track all these micro-nutrients and have all this data of our intakes

compared to what we might be aiming for all this whole list of things. It'd be very easy for at least someone like me who has in the past been very easy to get bogged down into little details and overly focus on this cool new information. Whereas, with the kind of essentially philosophy and thoughts you laid out in that piece around okay now that we can do this stuff let's not get too worked up about the tiny little details, let's remember what's the minimum effective dose that's going to support whatever goal we have. Could you maybe just talk a bit more in-depth about that philosophy and your thoughts that went into wanting to number-1 write that piece, but the kind of background ideas that led you to put that idea together and maybe a bit more for people who obviously haven't had a chance to read this yet of that thesis of a minimum effective dose of nutrition?

MARTY KENDALL: Yeah, I suppose as an engineer let's throw the data in there and let's see what comes out, and you see what the observations are, and you continue to follow that and that's been the journey with this blog optimizing nutrition of just continually following my nose and following the data and putting it out there and seeing what reaction I get. It's been really fascinating; this is another case of it. So, what I did mention before the nutrient optimizer score which is a measure of the micro-nutrient sufficiency across the board. So basically if you get 3 times the recommended daily intake you'll get a score of a 100%. If you push it to the highest carb or the lowest fat or the most insulinogenic end you get a lower nutrient density score, and at the other end if you get a really high core keto or really low carb or really low high fat you get another extreme. So, as I mentioned before, those extremes can test sort of there's an optimal point in the middle there, but I've said let's set 70% nutrient density score as I'll term it the 'minimum effective dose'. So in terms of protein that 70% nutrient density score tends to align with about 1.8 grams per kilo lean body mass of protein intake and higher protein

intakes tend to correlate with better nutrition. So, that means that even if you're focusing on micro-nutrients, vitamins, and minerals, essential fatty acids without even considering amino acids, a really high nutrient density score seems to come along with the ride. So, without focusing on protein you get a lot of protein if you focus on the most nutrient dense foods, which has been a real eye opener and consistent theme for me through here. So, that 1.8 is sort of a minimum effective dose I think for most people unless they're needing therapeutic ketos and actually needing therapeutic level of ketones at which point you do want to switch that a little bit. I think that's one point of contention and argument in the low carb keto community is I want to reduce insulin that I want to drop proteins because protein triggers insulin response but if we're trying to balance micro-nutrition and insulin load at the same time we still end up with a significant amount of protein. So that sets a minimum effective dose of protein, and then we look at fat there's no really essential fats except for omega-3 and a bit of omega-6, but we can get that with about .4 grams per kilo lean body mass and still get a significant amount of nutrition, and then maybe up to 65% of our calories within that range between 10% and 65% of calories from fat we can get a reasonable nutrient density score but the optimum lies between that. And then carbohydrates you can get a reasonable nutrition from very low carbohydrate, but at the very high carbohydrate and they end up with really high processed foods, so up to that 60%, 65% is the optimal range and optimum lies somewhere in between there. And then we come to the insulinogenic score and I think that's the most interesting one I hope will catch onto more and more is that a really low insulinogenic approach has minimal veggies, minimal protein, and a lot of fat and a lot of people want that if they're targeting therapeutic keto. But I think if you're just looking for low carb or you're insulin resistant and trying to manage diabetes you end up with a higher insulinogenic percentage but if you go really, really

high unless you're an amazing endurance athlete and got pancreas that works amazingly and really excellent insulin sensitivity I think being somewhere near optimal which sort of 40% is a safe bet. But then if you're insulin resistant you probably want to be a lower side of that that optimal 40% insulinogenic calories. So, that sets sort of a range there and there's a lot of argument and controversy between like the bodybuilding, evidence based area and the keto, low carb scene I think we just need to say well am I insulin resistant, if yes then maybe I need a lower insulin load. If I am not insulin resistant maybe it doesn't matter quite as much, but if I do test my blood sugar it'll go jeez a bit higher than I thought it would be, maybe need to steer the ship more that low carb, lower insulin load approach. So, yeah the minimum effective dose gives you those windows of macronutrients and insulin load, but then once you've set those guardrails it's like a kid bowling at a bowling alley with the bumper rails up there, they need those guidelines but then within that you can go like I'm going to focus primarily on maxing out my nutrient density and filling those micro-nutrient gaps with real food.

DANNY LENNON: Yeah, I really like that. I think there's kind of two sides that I picked on up on that I think are really useful. Obviously, having that minimum effective dose gives someone like a clear baseline; let's be above this range for nutrient density let's get to 70% or above and it gives them a nice target to aim for there. So, then on the flip side of that says okay once we're kind of well above that we're doing really well, to continue to keep increasing that there's obviously going to still be a substantial amount of effort and time that go on, and the further that goes up it's probably more and more true to get that from like 99% to a 100% is going to take substantially more effort to do that and it might get people to start thinking well number-1 is that kind of time and effort worth focusing here when it's like as good as it probably needs to be and it's passed that

minimum effective dose and can I place that effort and time somewhere else. And then the other part of it is, as you've mentioned we have – not just zeroing in on this one variable, so whether that's nutrient density or whether it's insulin load or whether it's energy density I think where a lot of the debates come up and confusion and problems is when people take one idea, one concept and look at one variable and let's see how to push this to the limit. And I think you've kind of alluded to this already, but it's the same idea if we take someone who is not highly active, and is overweight, and is just trying to be a bit healthier and they're eating tons and tons of carbohydrate, isn't it a fair thing to say to them okay you might want to lower your carbohydrate intake like that's the pretty standard thing that I think most people would say. Taking then that concept and saying well anyone that's overweight needs to – let's push this as low as possible and get insulin levels as low as possible all times you kind of can account for and mitigate against someone doing that by saying hold on if you do that it may be good from that one isolated view but you may be having these knock-on effects with nutrient density or the total energy you're going to have in that diet and so on. So, that's why I really love this approach that you have essentially of these three knobs that we have to turn, but if you start moving one by nature you're going to start playing with those others. It's beautiful what you've set up it essentially protects the system against someone going completely crazy on one thing because you end up getting punished on some other variable.

MARTY KENDALL: Definitely. Yeah you've hit the nail on the head and I think the exciting thing – and I suppose I've taken this journey for myself from being – considering myself pre-diabetic and looking at my blood sugars and go oh I really need to manage my blood sugars like my wife is type-1 diabetic to saying okay now I've stabilized my blood sugars now I want to lose weight, and okay I've lost a bit of weight I want to gain strength and hang

out with Luis and gang from Ketogains and Robb Wolf and okay now all my friends are really buff and Ted Naiman and jeez are going to catch up here let's get under the bar and start lifting that's a distinctly different approach to nutrition for each of those sub-groups and different goals, but I think people have great success with keto and go well that's the thing I need to eat more fat, I'm not losing weight I need to double down the fat because that's what worked initially for me, when they would have done is initially they'd stabilize their blood sugars and stabilized their insulin and normalized their appetite and got a great response. But really the next step is to say well okay your waist-to-height ratio is still a bit high let's focus on weight loss which then lowers energy density, and you know maybe need to tack calories if you don't get those results. And then how you're going to get really healthy, I love how Luis says, you know I'm not banging on about lifting to look buff and look amazing. It's the most effective way to get your metabolic rate up to get your mitochondria – challenge that mitochondria to burn as much energy, and then glucose and fat and oversupply of energy aren't as much of an issue. So, there's distinct categories, and different goals, and different phases and like want to design a system that carries you through from one stage to the next hopefully from metabolically deranged to optimal health and longevity.

DANNY LENNON: Yeah, you touched on an important point there of essentially the way the system is build is something that I've been trying to do with how I've started to view our overall approach to nutrition, and so one way I've tried to categorize it recently is looking at essentially the same way someone with training periodization might have a macro-cycle, broke into mesocycles, broke into micro-cycles if we think about nutritionists having this overarching long-term approach or a view from there we can break that down further into these focused phases or at least different

periods of time a particular focus that we're going to have, and so that might call for a different tool or at least us to put emphasis on a different matter and the one thing that that the way you've just talked essentially it allows for that. So, it's not telling someone here is the thing to follow, it's like okay depending on where you are at this time here's maybe some clues as to what you might want to do but probably in the future you're probably going to end up changing that. And I think that's something that gets lost when people start comparing one type of diet to another, it's that are we trying to talk about which diet is going to be best if I do it every day for the rest of my life or where is the value in here? So, I really like that idea and like I said before, it's really intricate the way that the framework is set up, so props on doing that. Before we start rounding things out Marty, is anything else that you think is kind of relevant to anything we've touched on so far that I haven't brought up or anything that you want to mention on either the optimizer itself or any of the stuff that's gone in behind it?

MARTY KENDALL: Yeah, first to give you an overview of where we're at with the project of developing basically the framework of this is the blog, and then I well how can I personalize this and on the optimizing nutrition blog there's awful of food list and optimal meals, but as we have talked about the right foods to fill those micro-nutrient gaps are different for different people depending on what they're currently eating, so I said well how can I personalize that, let's bring in cronometer data and look at the micro-nutrient gaps. So, currently that's a manual report that I do. You can go to nutrientoptimizer.com and submit your data, I can analyze that manually but we're working on a process that'll be out probably early in the new year where we can – it'll give you those minimum effective dose of your macro-nutrient parameters, and then which meals are going to be optimal for you, which foods are going to be optimal for you, and then

eventually it'll be a guided program; okay you're in the diabetes funnel let's continue to take you through that so you optimize, and okay you're blood sugars are stabilized we're going to put in the weight loss funnel, okay now you want to gain muscle and exercise, and you're really active and you got the energy now we'll put you into that parameters. So, it'll be a systematized approach to nutrition. So, yeah if they go over and initially if they want to check out the optimizing nutrition which is basically all my thoughts wide ranging, and describing my journey. And then nutrientoptimizer.com will show you – you can submit your email and have a look at the process, and if you want to report now you can do that now but in the short-term it'll be an automated process and that's going to be really exciting to help a lot of people and it's just really exciting to see this process helping people in real life to stabilize the blood sugars, and lose weight, and meet their goals.

DANNY LENNON: Yeah, for sure and it's certainly something that I recommend, so that all that stuff sounds super exciting. Before I get to the final question or so Marty to kind of bring this to kind of some sort of summary and to kind of tie it together some of the main ideas you've got into today what would you leave as a concluding remark for people about generally your approach to nutrition or how we should probably start thinking through nutrition a bit more, what are some of the I suppose final ways you want to leave it in terms of remarks that you might want to give to people around your philosophy towards nutrition and how you think about things?

MARTY KENDALL: Yeah, I suppose there's no one size that fits all and there's lots of arguments out there on the interwebs which are fascinating. But if you choose your parameters you want to target I suppose you're looking at weight, body fat, blood sugar you can target that one parameter but the other parameters are still a priority. So, yeah nutrient density is a priority, insulin load is a priority if you're struggling with diabetes,

energy density can be manipulated depending on your goals whether they be weight loss or you're a endurance athlete.

DANNY LENNON: Awesome! And so, before I get to the very final question of the show just remind people again of the best place to find your blog and so on and then anywhere to go on social media to find you or your content too?

MARTY KENDALL: Yeah, we've got optimizingnutrition.com is the main blog, and then nutrientoptimizer.com is the other tool that we're developing, and then I've got Optimizing Nutrition Facebook group and Marty Kendall's Nutrient Optimizer Facebook group. Optimizing Nutrition group is just where I learn everything and all my smart friends that I've met just keep on challenging me to grow and learn and stretch my brain. So, yeah it's a fascinating journey with those people and I've tried to consolidate a list of things that I have learnt into the blog and into the tool to automate the process towards optimal health.

DANNY LENNON: Yeah, for sure and I can definitely corroborate that based on some of the discussions that's been within that group and I find them fascinating to look through as well. So, for everyone listening I will link up to everything Marty just mentioned in the show notes, so please go and check all that stuff out. It's highly, highly recommended. And with that Marty we come to the final question that we always end the podcast on, which can be to do with pretty much anything even outside of what we've discussed today and it's simply if you could advise people to do one thing each day that will have a positive impact on any area of their life what would that one thing be?

MARTY KENDALL: I suppose to tied up all this discussion is there's a saying you manage what you measure, but I think you need to choose that one thing carefully and that one thing may vary it maybe blood sugars, it might be your weight, it might be your body fat, it might be

	weight on the bar, it might be your sleep or your heart rate variability just choose that one thing and focus on through your ride as far as you can, and then you maybe need to change the track but continue to manage that and monitor it, and yeah ideally improve your nutrient density, and longevity, and quality of life.
DANNY LENNON:	Awesome! Brilliant way to round this thing out, Marty with that I want to say thank you so much for your time today for everything we've discussed today, but also the work you continue to do like I mentioned a number of times it's always fascinating to read through your ideas and things, and information that you put together, but also this kind of framework that we've discussed today very much intrigues me. So, thank you for that work and I am excited to see where things go and looking forward to chatting with you again soon.
MARTY KENDALL:	Awesome! Thanks for the opportunity Danny. It's really a privilege to be on the podcast and did I learn a lot from listening to the many, many episodes, so thank you.

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