

Paleo Solution 181

[0:00:00]

Robb: Howdy folks, Robb Wolf here, doing things a little bit differently. I'm on the road and I'm actually hanging out with my good friend, Dr. Kirk Parsley. Doc, what's going on?

Dr. Parsley: Not much. Just living the dream of my much anticipated participation in a Robb Wolf podcast.

Robb: Doc Parsley usually listens to this thing on double speed, so he'll listen to it on triple speed now that we've got him on here, so.

Dr. Parsley: Yeah, since I know what I'm going to say, Robb. Robb will burn me even more if I'm only listening at a single speed, so. Yeah.

Robb: That will work. That work. So really quick, our podcast sponsors, performance menu, go to performance menu and sign up for that Journal of Nutrition Athletic Excellence, one of the best publications out there if you're talking foods, strengthening addition, et cetera, wellfood.com -- or actually, Well Food is not the real URL, I just realized. I think it's Wellfoodco.com. You can go and get grass-fed whey proteins, snack food, whatever tickles your fancy.

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You know, actually, we were talking about there would be some good cross pollination with our next podcast sponsor which is the Bunny Ranch, bunnyranch.com, very popular brothel in Northern Nevada. But we were trying to figure out if the Bunny Ranch could use Front Desk HQ to manage their stuff. So I'm going to have to balance off them. There might be a co-marketing opportunity and possibly some sort of a finder's fee if I can bring that to bear.

So Doc, thanks for having me. We're sitting on your straddle lounge here. Give folks a little bit of your background. You have a very -- you've leaved about 15 lives, so give them, like, eight or nine of those lives.

Dr. Parsley: All right. I'll just mention the legal stuff right now, so I don't have to any of your fans. So, you know, in my previous, I guess, the first chapter of my life, you know, we were the youth from trailer park origins much like year. You know, I did my best to stay out of prison and then decided to join the military. I went through seal training and did that gig for about six years and then decided I was a young single man's game and I was becoming neither. I was getting a little broken out, and so decided to get out and had to, you know, back to school, went to medical school, came back in a specialized and hyperbaric medicine and went back to the seal team as their doc.

And, you know, I did that for a while and numb out and it's on to a new adventure of private practice, you know, books and all sorts of information that, you know, I can get out for -- to explain all the stuff that I've learned over the last, you know, four or five years with -- working with the seals.

Robb: Nice, nice. So you know, I get a lot just -- I got a lot of questions from people who are interested in Paleo, interested in functional medicine. They're looking for career change. Would you recommend becoming a physician at this point?

Dr. Parsley: Well...

Robb: And, you know, for who and why and -- because I literally inundated by people who ask me, "How do I get in and help people? How do I affect change, like, what's the --you know, what do you feel like the upsides or downsides? Why would you or wouldn't you get into medicine at this point?"

Dr. Parsley: Yeah. I can say that, you know, if, you know, in the current scene, you know, I would probably discourage most people from that investment just like I would, just hurry to most people from the investment of MBA. You can certainly run a business without an MBA and you can certainly improve people's health without an MD.

And, you know, in the current -- in the current climate, it's not the medical education that's really the downside to it, you know, medical education is primarily language school, teachers who were to get resources and all that. And then it's really your job to go educate yourself and get smart on what's important for your population anyways.

So, that's not really the issue. The education itself is fine, but, you know, more and more just the design of medicine as to, you know, work for big health conglomerates and hospitals and big bureaucratic organizations.

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They just -- they move really slowly. You know, there's a lot of risk investment in there, there's, you know, just any type of bureaucratic organization is just something that's going to progress really slowly and medicine is progressing at the speed of light. And you really can't match those two. And it's a really frustrating system, you know, to work under a big bureaucratic organization. I want you to follow an algorithm when you're reading on your own and, you know, find all this cool research of different -- some very simplistic ways to prevent disease and optimize health without even, you know, talking about waiting for people to get disease.

So, you know, that's a frustrating course if you like. And if you like beating your head against the brick wall, then it's probably the right choice for you. I think as medicine evolve, this is going to become a more and more exciting place to work. But primarily, it's a financial issue, you know. How do you -- people like your listeners that are really interested in health who need to go talk to a physician because -- or some, you know, some expert in some field that can really optimize their performance, get them over, like, whatever kind of minor things that's getting to them.

They don't have a disease yet, but they, you know, they have some problems and they want to improve in some certain areas. And this is things that -- these are things that people like me can help with. But unfortunately, if it's not a disease, healthcare is not going to pay for it. And so, that becomes a really frustrating aspect of medicine. So, you know, that's kind of the wall that, you know, that's in between the idealized version of being the helpful doctor and, you know, the reality that you have to follow protocols basically to get your insurance reimbursement. And insurance isn't going to pay for health optimization. They pay for disease treatment, so.

Robb: And unless somebody slides over the disease treatment threshold and then game off. Yeah.

Dr. Parsley: Yeah. I mean it's frustrating as hell as a doctor to, you know, to work in a big organization that, you know, it's not going to let you provide certain treatment until somebody has a full blown disease, you know, to -- this simple example, you know, to watch somebody's fasting blood glucose

creep up over 10 years before you start giving them Glucophage. It's just not a very rewarding way to go about practicing medicine. Whereas if you could, you know, you catch it in the first couple of years, you say, "You know, this is creeping up a little bit. How's your diet going?" and you get involve in counseling with them on their diet or maybe it's their sleep or maybe it's the way they're exercising , you know, all the variables that we can talk about for, you know, their instrument sensitivity.

But if I spend an hour talking to him about all that, I don't get paid for that hour.

Robb: Right.

Dr. Parsley: So it's pretty hard for me to feed my family if I'm not getting paid, and that's the problem that most doctors and healthcare practitioners fall into. And most of us don't want to wait for it to get to be diseased, but that's the way traditional medicine is being run right now.

Robb: Interesting, and very expensive on the backend. So, Doc, tell people a little bit, you know, you wear a seal, you got out of the teams, went to medical school and then got back involved in the military. We just thought we had a computer malfunction there. It took a dive off of our porch.

So how, you know, you got back involve with the teams and started, you know, basically taking care of a lot of the health concerns that these guys have. What was that experience like initially in, you know, like -- yet some eye-openers with some of the health problems with these guys developed.

Dr. Parsley: Yeah, it was -- you know, what drove me into medicine in the first place was just sort of in the session of my own self-improvement, which is I think very similar with a lot of your, you know, a lot of the people follow your podcast in the whole sort of Paleo scene or into. You know, I wanted to make myself bigger, better, faster, smarter, better looking and all that stuff. And, you know, I just gravitated towards health, you know, the healthcare fields.

And, you know, I dabble around in all of them to see what I really like and, you know, and really gravitated towards sports medicine just because that was really, you know, my only exposure to medicine was when I hurt myself in sports. So, that's what I envision the doctor to be and that's what -- that's where I thought my passion would be. And later

on during -- further down my medical career, I got really interested in orthopedics.

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And so there are some sort of blend in that and my mind is which field I would go in sports medicine or going to be orthopedic surgeon. And, you know, so when I got assigned back to the seal team, I thought, "Hey, perfect, you know, this is -- you know, I'm really well steep in both sports medicine and musculoskeletal injury. And that's would seals do, they, you know, reap their shoulders out and hurt their knees and, you know, hurt their backs. And so I'm going to be totally set for this.

And then, you know, I go into my new job and, you know, I setup this -- I help setup this sports medicine clinic. And, you know, it's just a big booming thing and we hire all sorts of physical therapist and athletic trainers and stuff and then all the seals want to come and talk to me about how they can't sleep and how, you know, they're anxious and they can't motivate themselves to work out.

And I was completely taken aback, completely unprepared for that. And it just led to an entirely new line of thinking for me. You know, I thought originally -- well, you know, all this dig into the medical literature and the answers will be there. But the answers weren't there because the research is based around diseases and these guys didn't have diseases. They didn't have obstructive sleep apnea. They didn't have narcolepsy. They had insomnia. They had some poor -- some poor sleep habits there, some fatigue issues. They had, you know, body composition issues that, you know, that concern them, which is for most, you know, most of the general public would be happy to have the body these guys have.

But, you know, for them they -- if, you know, if they gain five or six pounds, you know, they're upset about it because, you know, they work probably harder than any population in the world they see fit.

And so it really kind of drove me down this evolutionary health model and, you know, really looking back at, "Okay, how did we evolve to sleep? You know, how did we evolve to eat? How did we evolve to exercise? And, you know, what are we doing right now that's so far away from that that's causing our current, you know, health crisis which I was calling this seal syndrome.

And, you know, that led me to, you know, reading a bunch of people's materials and actually I think I'd listen to a few of your podcast before I

really started counseling people and then they all came in and said, "Oh, you've got to meet this Robb Wolf guy and listen to this podcast, man. He sounds just like you. You guys talk about all the same stuff." And so that's really how I got into that. I know it's pretty long-winded.

Robb: No, no, no. That's perfect. The less I have to talk, the better. You know, Doc Parsley and I, I guess, met about two years ago with a pre or post deployment retreat gig that we were speaking at. And it was just -- it was pretty cool, we didn't get to talk a ton that first day, but he just kind of hit me with a wall of information kind of like what he did just now, which is, you know, I've been working with these guys, they're broken, this evolutionary medicine approach is the way to help fix them, you know.

And clearly, the way to really fix them is not to have them do a night ops and, you know, particularly in that training. But that's never going to change in that.

Dr. Parsley: Yeah, we have a hard time convincing the leadership to change the war tactics there and get more sleep.

Robb: Right, right. So within those constraints though, you know, what do you do to start helping these guys? These guys are on night operations and then they sleep during the day and how they go to sleep using Ambien, how they wake up using stimulants is not all that great, but the guys are coming back with vitamin d levels that were barely above rickets and interestingly would start developing GI problems and kind of muscle weight sting. And this whole, like, you said a syndrome.

And whenever we see this syndrome, it's like metabolic syndrome, it's multifactorial different people based on genetic variability will manifest different elements of this. Like, usually, you see all of it or at least, you know, four out of the five pieces or something like that. Some people manifest worse in one place and another. But it started boiling down to better sleep, better sleep counseling, you know, vitamin d, which starts talking about fatal periods specifically exercise.

But for these guys, it's more actually kind of throttling him back a little bit and become a little smarter about the exercise in thinking about the dose response curve and not -- how much can I do that's not going to kill me today. And, you know, thinking about long-term progression and stuff like that. And then food, which these guys are in an osteo environment a lot, so they don't have perfect control over their food but to the degree they have control, practicing that control and trying to do a little better.

So, you know, as you started working with folks, what was kind of a triage that, you know, the guy comes into your office, give us, like, you know, your -- you know, for this guy that comes in or maybe, like, there were three or four different kind of patterns that popped up or something like that. And then what was the flow for dealing with these guys?

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Dr. Parsley: Yeah. Well, I can tell you, my first patient that really set me down this road just sent me scrambling for literature. He's a patient that's become a really -- a really good friend of mine over the years of treating them. But, you know, he just -- he came in and really his biggest problem was that he had been just completely addicted to Ambien for multiple years and was only sleeping two to three hours a night on taking three to four times the recommended doses of Ambien.

And by the time he came to see me, he was just a complete shit show. Can I say that?

Robb: Absolutely.

Dr. Parsley: So he...

Robb: You've listened to the show before.

Dr. Parsley: Yeah, yeah. So he's -- I mean he's a complete wreck. He's a really bright guy. He's really motivated guy as most seals are, you know, they are hardworking, they're great patients because they want to get better, they want to improve their performance. And he, you know, basically we just - - he thrown himself on me to say, "Hey man, whatever you want to do. You tell me what to do and I'll do it and let's fix this." And I had no idea what to do.

I'm like, well, you know, the medical algorithm is progressively more sedating drugs. But as you can imagine, being a seal, you know, you don't want your seals mopping around on a mission doped out on Klonopin, or something. So, you know, given these guys, you know, what we call psychotropic drugs, drugs that affect, you know, the brain and the psyche is not really an option.

So you know, I saw him and he was, you know, primarily just a sleep patient. But as I started discovering, you know what -- you know, let me back up a step. And so, you know, when I was a seal, and the reason I expected to do so much sports medicine was that when -- when I was a

seal, you know, we took what we call buds candy or seal candy which it was 800 milligrams sort of orange coated ibuprofen. Yeah.

And, you know, we would -- people -- it was nothing for a guy to be taking 10 or 12 of these a day. And of course we were young, and so our kidneys didn't die and, you know, we made through all that. But when I got back to the teams, I would say, you know, the new candy we had become ambient.

So, you know, when he first talk to me about that, you know, I had already had some concerns about how much Ambien people are using. And I really, you know, in the back of my mind, I was uneasy about that, but I hadn't really had the approach we get.

So you know what, I start digging into the literature looking back towards that evolutionary health and all the same stuff that you always talk about, you know, vitamin d, cortisol levels, circadian rhythms, all these things are, you know, concepts that I'm learning about and how everything interacts.

And I decided, you know, that it was first -- you know, initially I decided that this is all vitamin d. This is D3 because these guys, you know, they're working it, they're sleeping during the day, they're -- anytime they are outside in the day, you know, they cover from head to toe in body armor and, you know, camouflage and hats and helmets and, you know, goggles, and all sorts of gear.

And, like, these guys are just vitamin D3 deficient, that's it. And so I gave this guy vitamin D3 and I'm like, "This is going to fix you." And he got a little bit better. And, you know, that was sort of my beginning process.

So as far as, like, what the standard guy looks like, you know, there are any variation from that to the guy who comes in and says, "Hey, you know, I'm only 28 years old," but kind of everything is going wrong, you know. I don't sleep really well and I'm in pain all the time. My performance is definitely, you know, going backwards even though, you know, I'm listening to Robb Wolf's podcast, I'm meeting Paleo, I'm doing crossfit 17 times a day, you know.

All these ridiculous, you know, kind of interventions that are doing not that you're ridiculous, Robb, but...

Robb:

I'm completely ridiculous.

Dr. Parsley:

Excessive, let's me say excessive, all these excessive interventions that they're making on themselves. And, you know, but I'm just not performing normally. I don't feel confident. I don't feel, you know, like my memory is slipping, my sleep is kind of sucking, my relationship with my wife is kind of sucking, my motivation to work is kind of sucking. And, you know, and then so, you know, given my introduction to this, my first question is always, "Well, how's your sleep?" And then I primarily approach sleep, you know, sleep like the first thing that I'm going to jump on because, as you know, it has so much to do with metabolic regulation and hormonal modulation, neurotransmitters and all these things that balance you out and make you optimal.

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So, you know, regardless whether they come in frankly and say, "Hey, you know, I'm a mess because I just can't sleep," which is very, very common or they come in and say, you know, just -- sort of ambiguous performance markers which is definitely is not a disease yet, you know, because this, you know, this sort of, you know, 50-year old man syndrome and a 28-year-old guy.

So I approach it all the same. I first talk about sleep and then, you know, sleep is so intertwined with nutrition that you can't talk about one without the other. And I try to, you know, I tried to go down the road of optimizing that first. You know, of the three pillars of fitness, you know, if you consider, you know, the fact that, you know, you have to sleep, you have to get nutrition and you have to exercise to be a healthy person, you know.

Sleep is the one that you can -- that you can't miss the most, right? It's the most important and it's the one that you can't screw with the most.

Robb:

You have that spectrum where, like, you know, if you have a little bit of body fat, you'd live for weeks, maybe months without eating and survive a couple of days without drinking water. But the only thing maybe more important than sleep is air, like, the only thing that you're going to die quicker without it.

Dr. Parsley:

Yeah, that's about it. Yeah. Yeah, I think the world's record for, you know, recorded, known world's record is about 43 days without food. Some guy lost in the Himalayans that got rescued after 43 days and not eating. He survived that. You know, people obviously go their entire life with a diet that doesn't resemble anything nourishing.

And, you know, people go their entire lives without doing anything that would -- we would consider exercise. But you can live -- you can live about 11 days without sleep. And after that, you're at serious risk of death. But you're pretty much a useless human being after about two days of no sleep.

Robb: Right.

Dr. Parsley: So that's a pretty -- that's a pretty compelling reason to put that first, I think. And actually, you know, one of the things that you talk about a lot is the chronic inflammation that comes with -- comes along with poor sleep. And obviously that has devastating effects to any kind of athletic or, you know, physical performing guy. And I just read an article in *Jam*, I believe they have to -- and they study people with a single night of -- a single night of sleep deprivation or sleep restriction, I should say.

I think they allow them to sleep about four hours and their inflammatory cascades were, like, 45 to 65% higher, you know, and it consist of too many cirrhosis factor and all of these bad markers that we don't want floating around, you know, just -- through the roof after a single, you know, after restricting themselves about four hours of sleep. And if you look at what the average American does is probably on par with that.

So you think about, you know, you had a higher level of performance and restriction like you would get in a seal team, and you're dealing with quite -- a soup sandwich by the time you start, you know, intervening.

Robb: I'm almost afraid to post sleep-related literature at this point because when I do it pops on my Facebook page or my Twitter feed and I literally - - it's almost a peasant uprising where people want to kill me. They're, like, "I have kids. What do you want me to do?" And I'm just, like, I'm just trying to educate. I don't know that I have a specific solution. It's just -- if nothing else, then you know why you feel like absolute dog shit after, you know, like last night I did fly down to San Diego today, last night so we were having some sort of GI deal and he was just squalling for about two hours during the night. And so not only did I have to get up early, but my sleep was punctuated and I feel like, you know, road kill today.

And so, I think there's nothing else. You know, we come from a culture, you come from a high-achieving military and medical background and, you know, most of our culture is predicated in the saying, "I'll sleep when I'm dead. You know, sleep is for wimps." And clearly, part of the selection process that we dealt with folks who go into the team, they do adopt to the stress better than normal. But it's kind -- the best analogy that I have

for this is that a well-made car is going to last better than a poorly made car. But both these cars will break if you drive them into a brick wall at, you know, 100 miles an hour, which is ultimately what we're doing when we're curtailing sleep possibly over training and then feeding ourselves for inflammatory diet all in the mix, which is kind of the typical, you know, special forces kind of regimen.

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Dr. Parsley:

Yeah, yeah. And in fact, you know, that's one of my biggest problems is convincing seals that they actually do need to sleep. During seal training, one of the things we, you know, one of the most famous events in seal training is how we -- or you don't sleep for an entire week. So you're up 24 hours a day for five and a half days or, you know, something along those lines.

I think it started during Sunday evening and then ends on Friday morning, if I remember correctly. And, you know, if you convince guys that they can go a week without sleep and they -- although they think they're functioning, they're actually not. But, you know, their perception is, "Hey, I went a week without sleep and I'm still functioning fine." So, you know, what's a couple of nights of not sleeping or a couple of nights of poor sleep, you know, that's not big deal.

And unfortunately, with the, you know, nephropathy on fitness that goes along with being a seal, you know, they think that the best solution is to workout really hard that day so that they'll sleep better that night. And of course, there's no possible way they're benefiting from an intense workout after they've slept for only two or three hours that night. But they do it anyways, and then they repeat that and repeat that and repeat that.

But, yeah, just like you talk about the civilian sector is not much better, especially when you start talking about, you know, executives of Wall Street traders, you know. If you look -- you know, there are some bragging list I read about in the internet of all these CEOs that only sleep four hours a night. And, you know, the general culture is, "Hey, you know, we'll just give up, you know, sleep the first thing to go." You know, I got to make money, I got to get my kids to school on time. I have to finish this project, so I have to stay up late. So it's not just when they're young. Although I read a statistic that I know you can identify with.

In the first -- I forgot where the study comes from. I'd have to look it up and give it to your readers when they all yell about this podcast. But the first two years of new parents live, they lose six months' worth of sleep.

Robb: Well.

Dr. Parsley: So that's pretty hard to overcome, you know, that's, you know, what we referred to in sleep medicine and sleep debt, and it's just like credit card debt. And if you're trying to pay back with the minimum payments, it's going to take 23 years...

Robb: And the compound interest of aging.

Dr. Parsley: Yes, the compound interest of aging. So you'll be, you know, you'll age 23 years and five years or, you know, whatever it turns out to be and trying to pay back that sleep debt at the minimum requirement instead of just buckling down and saying, "Hey, you know, I'm just going to sleep more." And I know that's hard to do as a parent, and that's why they used to give little kids opium and they -- in early 1900 get the kids to sleep.

But, you know, but there are, you know, there are strategies to get your kids to sleep better and there are strategies even to alter those parents, you know, to optimize performance for one -- at least one parent for their important events and so forth like that, you know, and these are coping mechanisms and they aren't the ideal thing. I wouldn't design the world this way if I did, you know, if I had the choice. Kids wouldn't start school so early, and all that stuff.

But, you know, dealing, you can -- you know, there are interventions that you can do to optimize that performance. And with evidence pours out over and over again is that those hours that you're giving up for sleep, you're just losing your productivity anyways. And so if you, you know, if you deprive yourself of two hours of sleep because you have to get a project finished or, you know, there's just enough time in the day, which is what most people's complaint is about why they can't sleep enough.

You know, you'll find, you know, the -- you can get on Google and Google Scholar and look it up all day. You'll find hundreds of studies that are proving very conclusively that the productivity loss of that next day outweighs the sleep deprivation.

Robb: Right.

Dr. Parsley: So you restrict yourself two hours of sleep and it takes you four hours longer to get your work done tomorrow. And it just doesn't -- you know, it doesn't make any sense, but just like it's hard to convince the seals with that. It's hard to convince the culture of that, especially when you have, you know, guys like Donald Trumps who only sleep three hours a night and everybody wants to be rich in America. So I got to be, like, Donald Trump, you know, I got to work 21 hours a day and sleep three hours a night. And it's hard to talk out of that routine.

Robb: Right, right.

Dr. Parsley: Yeah.

Robb: Doc, talk a little bit about how the effects of sleep that sneak up on you.

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Like, it kind of flies in under the radar and how that really, like -- Natsim totally wrote this book filled by randomness, you know, where, like, humans are really good at picking up patterns. But oftentimes we think that we see patterns that aren't there and then with this sleep deal. People think that they're functioning well, but they're really not. Talk about that.

Dr. Parsley: Yeah, yeah. So there is some really interesting phenomenon there. Most of us, you know -- okay, we first have to qualify this with the fact that only 7 to 8% of Americans actually sleep eight hours a night. So most of us don't have a good baseline of understanding what normal feels like.

Robb: Right.

Dr. Parsley: Normal being are optimal level of perofmrance.

Robb: Like if you're dropped on a desert island, you had no TV, no internet...

Dr. Parsley: Yeah, yes.

Robb: The sun goes down and you go to bed.

Dr. Parsley: Yeah, you could do whatever you want to do. You know, only 7 to 8% of Americans sleep that way anyways. But if you take, you know, the people who sleep well. So we'll say, you know, the people who are anywhere close to optimal, and you deprive them of a couple of hours of sleep. They only notice that difference, you know, their subjective experience if

their performance decline, only last about two days, two to three days. And after about three days, they will tell you that they feel normal.

And...

Robb: But they are in...

Dr. Parsley: And there is a litany of research, you know, to go through to prove that they're neurocognitive functioning it's there and simple things, like simple little computer research projects where, you know, a dot pops up and you push the right button or, you know, different -- an x pops up and you push the left button, something that simple. And you can just watch the error rate climb on this. And then the speed in which they get to the button just to climb, right, like, really, really quickly.

Robb: There's a lawnmower turned on, I'm going to go close the window.

Dr. Parsley: Sadly, I don't think the window is open.

Robb: Yeah.

Dr. Parsley: Okay.

Robb: High performance production here.

Dr. Parsley: So these folks -- so, yeah, they don't recognize the fact that they're impaired after just a few days. The first couple of days, they'll say, "Yeah, yeah, I feel a little slower. I can tell.

After about three days, they think, "Hey, I'm performing just fine." And then the performance declination depends on how much sleep deprivation you're talking about. But if I recall correctly, it's after -- I want to say if you sleep six hours a night or -- yeah, six hours per night for 11 days consecutively, your performance is the same as if you didn't sleep at all the night before.

Robb: Wow.

Dr. Parsley: And that's neurocognitive performance. But that definitely gets into physical performance. Now, when you, you know, we have an active drive to keep us awake in proportion with our environment. So when stuff really starts getting hairy and adrenaline starts pumping, you know, physical performance, you know, in that moment, if you haven't, like, chronically broken yourself down, the physical performance isn't going to

be that -- isn't going to be that measurable because you have so much, you know, adrenalized hormone changes to optimize your performance to make you very physical beast during that time.

Of course, overtime, you know, chronic sleep deprivation is then going to cause, you know, the things we know about muscle weight sting, chronic inflammation, changes in body composition. And then, you know, and then your physical performance is actually going to suffer no matter how much adrenaline you get pumping through you. You're just more likely to hurt yourself or to fail in your physical attempts. You know, you're going to be slower and more clumsy, your balance isn't going to be there quite as well for perception changes and all that stuff.

Robb: So looping back around, I'm trying to -- talk to folks through kind of the -- and maybe we'll start from the top down, but, like, the, you know, HPTA access going into cortisol, going into thyroid dysregulation, like, where does sleep deprivation kind of affect all that stuff? And then maybe we'll Segway a little bit in the TBI element and all that dramatic brain injury and how that really has a -- that plus sleep deprivation really is this new horrible kind of -- kind of thing that we're seeing on the horizon.

Dr. Parsley: Yeah, yeah, definitely kind of military population. But, yeah, I mean the HPTA access is, you know, I would say the most complex aspect of -- you know, we try to break the body into systems which is, you know, completely arbitrary.

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But in the medical world, you know, we try to break the body up in the systems as just a way to learn about it. And so when people talk HPTA access which, you know, they currently, you know, educate themselves and, you know, your podcast does a great job of giving guys the basics of that and then they want to come talk to me about, you know, this isolated hormones, this isolated thing.

Well, you know, I think it's AM cortisol because of, you know, x, y, and z. Well, you know, the truth is just like exercise, when you say, you know, how do you get in shape and something I've heard on your podcast and, you know, other people say is, when, you know, everything works but nothing works forever and nothing works for everybody because everything matters, right? Like, everything matters when we're trying to get fit and everything matters when you're sleeping.

And when you get into the HPTA access, everything matters, right? Like, every single trace element, every single vitamin, every nutrient, every

hormone affects everything else. So to try to say, well, you know, just AM cortisol, you know, that's a good way to talk about it conceptually so that you can get people to understand the basics and you can get people to optimize it.

But, you know, the honest fact is we cannot decipher this mess, you know, I mean it's worse than -- the only thing harder than finding a needle in the haystack is finding a piece of hay in the haystack, right? And that's what you're doing.

Robb: Right.

Dr. Parsley: I mean this haystack is all meant to be there and to try to find that one little piece and say, "Well, this is the problem," it's just not realistic. So, you know -- and big broad strokes, you know, the big issue in this, you know, westernized view of the world and productivity and the loss of the siesta, which I have, you know, kind of some cool recent research I've done on the ideology of that. But, you know, just the western approach in. In general, in broad strokes, you want to say, you know, if you don't sleep your cortisol rises the next day. It has to rise the next day to keep you awake.

But if your cortisol rises the next day, then it's harder to go to sleep that night because now you have excessive cortisol. And one thing we know about the fight or flight system, you know, which is, you know, the adrenal -- so the reason adrenaline is called adrenaline is because it comes from the adrenal glands, right? And the adrenal glands are the glands that keep us awake and they keep us awake in proportion to our environment.

So if our environment is a guy shooting at us, we're really, really awake. And if our environment is laying on our back reading a book, then, you know, we're not so, you know, super awake. And so our hormones are drastically different and cortisol is one of those major hormones that we associate with being awake.

So if your -- what we know about the fight or flight is that cortisol is great during fight or flight. And it actually -- it actually improves your immune modulation and it improves your brain functioning for that specific task and it does all sorts of great things for your body. Obviously raises your blood glucose and it allows your limbs to exercise, you know, get -- do more activities, be strong and faster, longer and lasting, all those types of things.

But one thing that we know for sure, you know, if you look at Robert Tupolski's research, he's like, you know, the guru of cortisol studies. One thing that is completely abundant and clear is that chronically exposing your brain to glucocorticoids, decreases brain functions in all sorts of ways. And some of these things are really, really hard to gather to regain. And I think what you're alluding to, you know, the one thing that I talk about a lot is that the brain that is chronically bathe in cortisol looks a lot like the traumatically brain injured brain. And primarily and the fact that you lose that prefrontal cortex functioning which is what we -- which is really what set us apart from the apes or, you know, or other primates.

And the reason that we can say, "Gee, if I do this today three or four days or weeks or months or years down the road, this is likely to be the outcome," it's because of our pre -- you know, prefrontal cortex. And one of the things that we always joke about between ourselves, you know, is our executive function is sucking so bad, your ability to organize your day and keep thoughts in your head and plan ahead, and all that stuff. That's all in prefrontal cortex.

[0:40:00]

And so, you know, when you have, you know, 80% of Americans out there who are sleep depriving themselves in order to get more done. But then they're damaging their brain with their performance is so bad to just literally going to take months or years to recover that function.

You know, it's a hard thing to convince people just like it's a hard thing to convince people that fat doesn't 'make them fat.

Robb: Right.

Dr. Parsley: It's along the same lines, everybody still wants to kick that sleep out of there. But, you know, the basics of that HPTA access is, you know, that's what I point out to them, is cortisol issue. And then, of course, as you've talked about before, cortisol then affects everything. And lack of sleep decreases growth hormone, it decrease testosterone, it decreases just anabolic activity in general.

So you can't possibly be a crossfitter and be making gains while being sleep deprived. Those two things are mutually exclusive. You've got to choose on the other. And then, you know, the T3 that we're talking -- that you're talking about, the chronic -- we know that chronically elevated levels of glucocorticoids in the blood, they alter an enzyme that converts T4 into T3, T3 being the active form of thyroid. And when that --

I'd have to look it up, I can't remember at this stage if that's -- if that's a competitive, you know, if it's a competitive binding to that or if it's a mutation of the enzyme itself.

But it -- what it ends up doing is you produce a lot of what we call reversed T3, which doesn't fit into the receptor and doesn't -- and while it will feed back to your hypothalamus to tell your brain that you don't need any more thyroid, it won't actually go to the cells to do the things that thyroid does, which is, you know, primarily...

Robb: Deal with LDL cholesterol, metabolic rate, the whole...

Dr. Parsley: Yeah, yeah, exactly, regulate all the metabolic functioning of the cell, you know. Basically, its respiratory rate is controlled, you know, by these types of hormones. And if you trick your brain into believing that you have enough of it, then you're really screwed. But you have this really high RT3 level. And so you have a lot of T3 going around in your TSH and then it doesn't elevate, so your doctors says, "Hey man, your TSH is great. You don't have any thyroid issues." But you may only have, you know, 10% of real T3 and then the other -- you know the rest is wasted, and that's why you're feeling lethargic and all those issues, you know.

Robb: You know, and from evolutionary standpoint, it's interesting, like, it's actually really good wiring because when you look at -- it's kind of the adaptation to chronic stress, you tend to lose muscle mass and metabolic rate goes down. You kind of have immune suppression in a lot of ways and you create body fat.

Dr. Parsley: Yeah.

Robb: And so with, you know, when biology is, you know, kind of weighing what's going on with us, the main deal is survival and so forth. Under a tone of stress, we don't necessarily want a really active immune system right at that point because we don't necessarily want to be sick. And so infections can kind of go into a low-grade chronic kind of state to the, you know...

Dr. Parsley: And it's a really high -- this is a really high metabolic cost to have a robust response.

Robb: And immune...

Dr. Parsley: Response to anything. It's high. Very, very high metabolic cause to that. Yeah.

Robb: And so there's good machinery that goes into this, but this is why people get the whey and loss muscle mass and then this is also kind of weird. And you are one of the first people that really always knew this. But, you know, kind of put the pieces together for me and understanding this. You go on vacation and then you get sick just because your cortisol actually normalize...

Dr. Parsley: You actually have an immune system again.

Robb: And you actually get an immune response. Yeah.

Dr. Parsley: Yeah. So you're exactly right. I mean the -- you know, the postulate of an evolutionary survival aspect of this, you know, intuitively it makes great sense and it's one of those things you can never prude and will let the academics speed each other up for the rest of their lives about that.

You know, if it makes logical sense to treat it that way, then we treat it that way. And if it works, great. And then we just keep treating it that way. But, yeah, if you think about it, you want to -- if you're in a time, you know, evolutionary, if you're in a kind of sustained stress, you're probably in famine, right? You don't consistently run from lions and tigers. You get that chance once and you lose.

And, you know, you just don't find if you look back, you just can't find a whole lot of reasons that, you know, any type of paleolatic man would, you know, climb out of this caving, go run for 26 miles in a day or anything like that.

[0:45:00]

So this long sustained stress thing, it's kind of new to us because we don't do it in cases of famine where our body is just probably a little confused. But during the case of famine, like you said, it's highly protective to put on a bunch of body fat, get rid of all as high metabolic requirement muscle and lay around and not do very much.

Robb: Do nothing. Don't make babies, don't do anything. Yeah.

Dr. Parsley: Yeah. And now went -- and then once the food comes back, now you can deal with it. Yeah. And so when -- so yeah, exactly what you're talking about. I think you were in Hawaii when we had that chat about, you know, how great you're feeling in the tropics. And I'm like, "Yeah."

Robb: The sun.

Dr. Parsley: You know, the sun, T3 all this stuff. And then a lot of people will say, "Well, you know, I always get sick on vacation and I say, "Yeah, just because you don't have an immune function the other, you know, 50 weeks out of the year." You've chronically suppressed your immune system due to this HPTA dysregulation. When you finally get enough rest to rebalance your cortisol, drop your glucocorticoid levels down to where your immune system can function.

You know, like I talked about earlier in the fight or flight, you know, the initial response of the fight or flight, you have a heightened immunity, right? You have a heightened ability to heal in all sorts of things because you're fighting or fleeing and your body is designed for that. But you do that chronically and your immune system just drops down to nearly nothing.

And then as soon as you gain that back, guess what, it's time to start to fight and all that stuff that we're just kind of ignoring, you know.

Robb: Right.

Dr. Parsley: And a lot of that, you know, is even worsened by a bad diet because a lot of what you're going to try to repair is the gut floor, you know, and that gut inflammation and all those types of things. So it's a really common occurrence and it's one of the main things that I use to try to convince people that they actually need sleep.

Robb: Nice, nice. Doc, talk a little bit about, so kind of dovetailing in from the some of the TDI stuff into post-traumatic stress. Like, you also pointed out to me that -- so the adrenals produce not just adrenaline or not just cortisol but also at the, you know, adrenaline. And that you can enter into a phase where your adrenal response should have both cortisol and also kind of an adrenaline response. But then if the cortisol is kind of tanked, all that you are getting is actually this kind of almost terror-like stimulus and that the cortisol actually has a mitigating effect on that. Talk to folks about that a little bit.

Dr. Parsley: Yeah. So that is one of the most convoluted message in all of the medical literature is, you know, does this phenomenon and adrenal fatigue and cortisol mismatch actually occur. And, you know, clinically, I can say yes, you know, from my small and the people that I see when I, you know, when I test these guys that are broken, their AM cortisol just doesn't

exist, and it should be somewhere up around 20 and they're coming in, like, .5 or something.

Some people who are just undetectable. And I'm like, well, you know, that's a pretty important hormone. Do we have it right now? It's, you know, 9am, you know, you kind of need that to be moving on with your day. But the, you know, when you start trying to talk about the effect of cortisol with the epinephrine, norepinephrine, which, you know, we have -- which we refer to as adrenaline, you know, there's changes on multiple access. And this is why I say it's so convoluted.

But, you know, whether you buy into the idea of adrenal fatigue or not, with excessive adrenaline levels, and when I say adrenaline, I'm talking about just all adrenal hormones. If your adrenaline is just cranking over time all the time, you change everything, right? Everything matters, like I said, you down regulate receptors.

And whether it's a case of you just have more epinephrine and norepinephrine response than you would have if you actually had this balance of cortisol with epinephrine and norepinephrine. Or it's a matter of -- like you said, there's actual -- say, like, you know, there's a perfect mixture to make the cake rise. And the cortisol, the epinephrine ratio is, you know, one of those perfect mixtures that has to be there. And that ratio goes off, and you experience basically like this panic type symptoms.

And, you know, and I don't know which it is and I don't think anyone can really say what it is, you know. The school of thought that I agree with the most is that the cortisol mismatch. Actually, does occur and that you aren't secreting enough cortisol in relation to how much epinephrine and norepinephrine you're secreting, which then causes your heart to raise and your heart -- just your heart raising can make your brain then perceive, you know, you have more nerves going from your body to your brain and then the other way around.

[0:50:18]

And so your raising heart makes your brain wonder what's going on.

Robb: What the heck? Right.

Dr. Parsley: And so now I'm worried about why my heart is raising or it can go the other way. I can get some stimulus that ordinarily wouldn't really affect me much. But because of all the neurological changes and neurotransmitter changes and balances of receptors and, you know,

long-term potentiation of pathways and all these things alter, some stimulus that ordinarily wouldn't, you know, send me flying off the wall, this, you know, sends me reeling because I have this super high response to the stimulus and that then causes an adrenaline response. That causes me to go into fight or flight, and it's analogous to the PTSD, you know. Like, the whole idea of PTSD is that you have this disproportional response to your environment, right?

So a loud noise that ordinarily would startle us, you know, makes you panic and sends you back possibly into memories and events where, you know, you heard a similar noise that really, you know, that really scared you. And, you know, if you put down on a continuum, like everything, everything else in the world in our bodies is a continuum and I -- I'm not willing or ready to believe that PTSD is not that same way.

If you put them on a continuum, well, yeah. I don't have PTSD, but all of a sudden I have anxiety. And I'm anxious over stupid stuff, you know, like my phone rings and the first thought that hits my mind is, you know, is the FBI kicking in my front door right now and my wife is calling you to tell me, you know, to come to the FBI.

Whereas the normal person, their phone rings and they go, "I wonder who's on the phone," and they look at their phone. So you get this huge anxiety response and it's not necessarily because the FBI has ever kicked in my door, it's because I have this complete mismatch of adrenaline to a cortisol ratio or, you know, I just have this complete mismatch of receptivity to that.

And that's just -- it's such a, you know, completely convoluted mass that I think it's impossible to pull, to pull any one thing out of that, say, "Well, you know, that's a PTSD cause from your child abuse or that's cause from your sleep deprivation or that's caused by malnutrition or that's caused by a hormonal deficiency.

Robb: Right.

Dr. Parsley: It's just too intertwined and it's too convoluted to say that, you know, any one thing is the cause of it in my mind.

Robb: You know, I did a post recently on evidence-based medicine and clearly -- like the point I made in the post and say frequently is not that I'm anti science at all, like the better science we have the more randomized control trials we have, you know, hopefully the better. But we -- it's very, very easy to get a situation that is so complex that you are completely off

the reservation. Like, there is just never ever going to be studies that fair this stuff out.

And, you know, like reading the book in the motorcycle maintenance. This guy who very brilliant dude went in to scientific research wanting to reduce the amount of unknowns in his world and discover that within research. Every time he answer any question, you generate a bunch more.

Robb: Yeah.

Dr. Parsley: And so it's really, you know, like we do the best we can to, like, understand known mechanisms, proposed mechanism and even within, you know, quote known mechanisms for ages. It was assumed that lactate was a byproduct of, you know, hard training and that it just have to be recycled and delivery the cycle and it negatively impacted muscle function. And this guy Brooke figures out, "No, it's actually used as a substrate in glycolytic activity and we kind of call it the Brooke pathway." So something that was right under our nose for ages, we actually ended up discovering, "Okay, this thing is not actually a muscle toxins, it's actually a fuel."

So we do the best we can to understand the mechanism. We do the best we can to look at the science and everything. But then at the end of the day, it really boils down to a lot of tinkering. And I just have this kind of ongoing, you know, thoughts about the folks who kind of shroud themselves in the evidence-based medicine, you know, kind of protective bubble where -- okay, so we don't really have much evidence for much of anything. Like, it's very good. Or I mean, do you agree with that? And it's very easy to get off the reservation and have a situation where you're trying to describe something that you are able to treat clinically.

[0:55:04]

And maybe somebody else is able to address this stuff because they deal with meditative breathing and some, you know, walking and diaphragmatic breathing. But we can say, "Well, that kind of links back into the parasympathetic nervous system and probably down and regulates cortisol production that normalizes it." Like it ends up being somewhat similar mechanisms tackled in different ways. But it's going to be damnably impossible to find any type of, like, a randomized control thread -- control study to address any of that stuff.

Robb: Absolutely. And, you know, you hit on what I think is the crux of medicine and, you know, sort of the division point between, you know, me and -- I would say your mock one motto general, you know, guarding variety doctor. I base a lot of what I do on my clinical experience. Not every doctor is comfortable doing that, especially if you work for a big organization that dictates how you practice medicine.

But, you know, there's a famous, you know, famous commencement speech at -- well, not a commencement. What's the opposite of it when you're graduating in honor?

Dr. Parsley: Isn't that? Yeah.

Robb: Yeah, commencement. Okay. So the commencement speech, and I want to say it was Harvard law school in, like, 1936 or something. What -- you know, one of my professors in medical school has quoted us. And it was some famous scientist came up and -- or physician came up and gave the commencement speech and said, "You know, we have two news for you, one bad and one worst. The bad news is that we -- 50% of what we have taught you was wrong, and the worst is we don't know which half it is that's wrong." So it's kind of up to you from here, you know, good luck and stay up on the medical literature.

And in 1936, I don't know how many general articles were published, but it fails to what's published today. Currently, it's about 35,000 medical journal -- peer reviewed medical journal articles published every year, not to mention all the -- you know, these books that come out and articles and blogs and all that. It's a lot of valuable information.

And obviously, if you did nothing but sit around and read all day and you took Kevin Trudeau's speed reading course and, you know, could read a thousand words a minute, which still probably take you 450 years to read what comes out in a year.

Dr. Parsley: Right.

Robb: So you can't actually practice medicine and read all the literature. But you know that most of -- you know that at least half of what you know is wrong. So how do you -- how do you handle that?

And, you know, one of the things that I tell people all the time and all the scientist who listen to your show who are about to cringe and start sending hate e-mail, remember my e-mail is Robbwolf.com. Anyways, but, you know, what I always tell people is that, you know, the gold

standard in medical care is the double blind placebo controlled randomized clinical trial. Right?

And that's when you get 35,000 patients from 17 different Ivy league schools and they get studied and the doctors don't know the difference between the patients and the patients don't know whether they're getting the treatment or, you know, getting the control or getting the treatment. And you crunch all of that data and you have to reach a certain statistical significance to then say, "Okay, this is definitely a correlation."

Dr. Parsley: Well, what to do, right? Like, okay, now I have a correlation. What the hell am I going to do with the correlation, right? And if I waited for that, you know, 35,000 patient trials to come on. And, you now, keep in mind that funding has to come from somewhere. And that funding largely has a pharmaceutical-based interest in that. And if it doesn't, you know, if there are some sorts of benevolent funding. It's going to move you even slower, more slowly because, you know, dollars make the research go faster.

You know, if you wait around for, you know, a gold standard study to tell you what to do with ever patient, you know, you're never going to be able to actually take action on patients. And it just makes sense that if, you know, to me that if I read some basic things and, you know, I'm a simple guy with a simple mindset towards this, and that's my whole passion towards evolutionary health is that, you know, when you come to me on 12 medications and you have a new symptom, I am either, you know, the most diluted man in the world or an absolute liar if I tell you that I can figure out which medication is causing it or why that pathway has gone wrong. Like I said, everything matters.

[1:00:00]

Robb: Right.

Dr. Parsley: And if you're not sleeping well and you're not exercising well and your nutrition sucks and you're on medications and then you come to me and, you know, and your dog just died and you lost your job and, you know, all these variables that came across in my life. And you come to me and you report a symptom and I say, "Well, well you all need is this pill because this pill will take care of that symptom or, you know, you need to re-increase the dosage of this one that you're already taking or decrease the dosage." That's just a complete impossibility. It's just -- there's way too

much going on and that it's never going to be a randomized clinical control trial for...

Robb: Increases that person's...

Dr. Parsley: Your patient that's on these medications that has his dog died and lost his job. It's not -- so that's just not going to exist. And not to say you can't make generalizations, but to me what makes sense is, "Okay, well, we know your sleep sucks and we know you nutrition sucks and we know you're exercising. Let's fix that first, okay?" Once we get all of that to the best we can do, let's start tinkering around metabolically. Let's, you know, do a -- study -- let's pull out every biomarker that we know that matters.

And especially anything that's attributable to what you're complaining about and let's look at all of them and see how that looks and then maybe, you know, we start saying -- we start tinkering around with your thyroid or your DAGA or your pergola and all your -- testosterone, your estradiol or your, you know, and the females, you know, getting into progesterone and, you know, the different forms of estrogen and all of those types of things.

You know, not just much more sense to me, like, you know, let's do everything that we know is optimal. And, you know, that's a big argument in medicine, what's optimal health. Well, you know, my argument, what I believe and what I have very many hated debates about is that optimal is useful, right?

Robb: Right.

Dr. Parsley: We were all better at 25 than we are at 45. We are better, faster, stronger, more resilient, we could handle sleep deprivation better, we could work harder and longer hours. We could work out harder. We could lift more. We could run faster, right? We had less disease, we have less aches and pains. So let youthful lies them, right? Like, that's optimal. Let's get everybody to feeling and performing metabolically at 25 and then let's address what you came here for, right? Like, if that symptom still exist, then let's see.

But what I see, you know, what I see over and over again when I take that approach. So usually once you optimize people, you find out, well, you know, they have deficiencies of x, y, and z and they had excess -- they have excesses of x, y and z and, you know, they weren't doing enough of this and they were doing too much of that. and once we normalize all

that, guess what, that cure the program and it turns out they didn't have an Ambien efficiency or Prozac or, you know, any one of those other silly analogies, you know, so.

Robb: Yeah.

Dr. Parsley: That's the way I like to approach it.

Robb: That's awesome. And it's -- I think that's part of when I met Doc Parsley. And it was funny, the gig that we did was immediately before I went to do the I Caveman show. Like I literally -- I have to fly in on this thing. The Discovery Channel had actually talked to the resiliency folks so that I could show up at the Discovery Channel late, one day late, flew in, did this talk, meet Doc Parsley, talk to him really briefly, went and got an absolute, like, 14-day kick to the balls and life altering shot to the nuts.

Robb: Yeah.

Dr. Parsley: Of no sleep super high workout with no food, lost 18 pounds, got the first gray hairs that I had ever had during that whole thing.

And had some -- not surprisingly some after effects on that, I can see...

Robb: Shocking.

Dr. Parsley: That is taking two years to really get a grasp on. But it -- and for me because my -- I think because my food was pretty good and at least cognizant of trying to get the best sleep that I can we just had. So we, you know, 11 months ago on that, definitely has been another kick to the gym. But that's why we're wired up biologically to have kids when we're about 13 to 15.

Robb: Exactly.

Dr. Parsley: That's a whole other side, not when you're 40 like I am. But it's taking me a lot of tinkering to get back to what I feel like is kind of square one and where I feel like it did, probably about like 8 years ago. You know, my body composition reflects where I was, probably about 8 years ago before I open the gym and start trying to do Crossfit and 50 zillion other things and -- but you know, I think that the -- to the degree that I've had my food kind of wired in, do a little bit of adrenal support and stuff like that. I think it kept me motoring along. But eventually even that reasonably well-tuned car is going to break if you're driving it like an asshole which is what I was doing.

[1:05:00]

Robb: Yeah.

Dr. Parsley: Yeah.

Robb: Yeah. And, you know, you can't underestimate, I think, you know, your knowledge of nutrition and your dedication towards sleep. And I know even, you know, I recall a conversation we had about you being a little stern with Nicky about, like, hey, these games are going to be played before bed. You know, we're -- I'm sleep at these many hours. And, you know, the reason you were able to recover from that, and I think, you know, by enlarge the reason that most people don't recover from that is because those two concepts aren't there.

Dr. Parsley: Right.

Robb: And even though, you know, yes I will occasionally deprive myself, right? I mean, I'm, you know, this -- I'm not as zealot about this. I understand it that sometimes, you know, life demands and require you to not give as much sleep as you'd like. That has to happen and I'm 'not preaching abstinence here to a bunch of urgent there. I mean this is -- you know, this is an area that if we put enough focus into, we can literally, you know, just change the world. We can complete change the disease profile of America and, you know, you can break it down into, you know, every kind of world you want to and you can get into the financial and you can talk about how much money has lost by poor nutrition, how much money is lost from sleep deprivation, you know.

I recently listened to a lecture of a guy who broke it down to, you know, there's, like, 91 billion man hours lost in America every year just for sleep deprivation. Well, 91 billion man hours had an average, you know, salary of 10 bucks an hour, say, we're talking about a hell of a lot.

Dr. Parsley: Right, right.

Robb: And you could that. I'm sure the same thing was nutrition. And it's hugely underappreciated field in the world. You know, you're -- you fortunately have a population that's interested in all of that stuff and makes it a little easier to get your point across. But, you know, the lay audience just is not ready to hear that.

Dr. Parsley: Right.

Robb: And one of the biggest problems is any kind of coach. And I put doctors in the category being a coach. You know, it's to be able to tell people the things you want them to know, but in the way they're ready to hear them. And so sometimes you just got to start really, really slowly and, you know, just like you do with, you know, with diets. I mean, maybe the first step is just stop going to McDonalds or...

Dr. Parsley: Right.

Robb: Or drop McDonalds once a week or, you know, don't eat Twinkies anymore or something. Like, we're way...

Dr. Parsley: Omit the cream filling.

Robb: Yeah. We're super far from optimal here. But, you know, let's start somewhere.

Dr. Parsley: Somewhere, right, you know. Yeah. So, you know, I mean your recovery definitely was, you know, exponentially accelerated by your awareness of that even though you weren't always doing the right thing, you knew what -- you knew how to get back there as -- you knew you needed to get back there as soon as you could and you took that opportunity and make it happen.

Robb: It was either that or start to 45 points. It felt like hell, so.

Dr. Parsley: Yeah. So, and you know, it's funny I guess somewhat similar to the food that just kind of winding this thing down. But me being quote the food guy almost every talk I go into, I end up talking about sleep. And after everything that I've seen and I'm the gluten avenger and paleo, paleo, paleo and all the rest of that. But if the lights went out and we all ate gluten, I think that a lot fewer people would be sick.

Robb: Yeah.

Dr. Parsley: Fewer people would have problems. And that's a tough one for me to say. But when I look at the effects of photo period and sleep deprivation on people on their metabolic status, on their systemic inflammatory status like I really do put the sleep piece and the photo period piece ahead of the food. Like, I think that we could get away with a lot more shenanigans at the dinner table if the sleep was more dialed in.

And then when you start encroaching on the sleep and you put a bad diet on there and were either over-exercising or under-exercising, we don't get enough community, we don't have enough kind of, you know, what is it, beta wave kind of, you know, relaxant type activity, then the wheel just start falling off the wagon.

And depending on how robust you are, it may take longer if you're less robust or one of those factors is particularly gnarly based on your constitution. And it's going to take you down sooner. When I look my own kind of demise and all this, my sophomore going into junior year of college, I decide to switch from a biochem degree to -- or a microbiology degree to a biochem degree, which meant that I have to take a bunch more physics and calculus.

[1:10:00]

And so I was taking 25 units of chemistry, physics and calculus running the premed club, running this thing, running that thing, and I did for a long time. But, you know, when I look back, it's like that's when my digestion started failing.

And then a couple of years later, that's when this thing started failing, that's when this thing started failing. So it's interesting. You can trace it back and you can see where youthful ignorant, you know, it definitely took me down at the heels and it does that with a lot of people.

Robb: Yeah. And that's why we say youth is waste on the young, right? Well, I mean - and I think that, you know, you're really on to this something and as you're saying that, it kind of made me think of things in a slightly, you know, a different view on something that I've thought about many times as the progression of these things and which comes first, the chicken and the egg, you know.

But I couldn't help but think while you're talking about that. Well, yeah, you are really young when you started really screwing yourself up, right? And what changed, right? Did, you know, did some new cells invade your body that didn't like gluten? No. I mean your hormones has changed, right? And as your hormones changed after a while, then your body started changing and, you know, all sorts of epigenetic phenomenon and started taking places. And then, you know, you've slowly started to fall apart after that, you know.

Robb: Right.

Dr. Parsley: And that's why I say, you know, a, you know, you can't extract the HPTA access from nutrition and you can't extract nutrition for any, like, HPTA access. But, b, you know, also youthful as optimal.

Robb: Right.

Dr. Parsley: We can withstand that insult. You know, when I was at -- when I was a 22-year old seal, it was pretty hard to break me down. You know, I mean, I could -- and seals are specifically selected for people who are really good at suffering, you know, like -- and that's pretty much the hallmark of the seal training. If you can suffer through it...

Robb: You're good.

Dr. Parsley: You're going to make it.

Robb: Right.

Dr. Parsley: You don't have -- you don't have to be a world-class athlete, but you definitely have to be world-class resilient. And if you can take that beat down, you know, and still thrive and learn and, you know, they test you -- you know, you're going to get cognitive testing, you know, and then the form of academics. But also all this muscle memory stuff and all that -- all of that learnings occurring while you're sleeping, right?

And if you're sleep deprived all the time and you're over-training all the time and you're chronically bathing your brain in glucocorticoids and, you know, decreasing your cognitive functioning but you can still perform at a high level, I would beat you down for six months, then you're the guy we want.

Robb: Right.

Dr. Parsley: And then now we're going to go training how to be a seal, right? And so, you know, like I said, you know, once I came on to that training, you know, and it got back to the seal teams, and there's a little more craziness for a while, you know, when you're actually training to be a seal. But, you know, pre-9/11 seals we didn't have the combat routines that these guys have, you know, nothing close to the type of deployment cycles these guys are carrying, and all that stuff.

But, you know, you got the chance to, you know, start controlling your diet pretty well and your exercise routine pretty well, and all these types of things. And like I said, I mean I was 24, I was sleeping, you know, 8

hours, 9 hours a night. I was working out in a really educated way for that time period.

Robb: Right.

Dr. Parsley: Whatever Bill Philips was promulgating at that time.

Robb: Both for our system.

Dr. Parsley: I thought I was really smart in those days about exercise. But, you know, I could withstand a lot, you know, I mean whether that's a car crash or, you know, or having to stay up a week to study and all that, you know, when I got into college, I could pull -- I pulled all night all the time. They didn't even seem to face me because I was young and youthful. I had good hormones and most of my life I've been doing the right thing.

Robb: Right.

Dr. Parsley: After, you know, by the time I finished medical schoolman, I stepped off a curve and it hurts and I want to go -- I feel like crying and, you know, I'm anxious about it when I drive home and I got to take a nap and, you know, it was just, you break -- you definitely break yourself down over time. And then it's -- just like being obese, it's a long haul to get back.

Robb: Right.

Dr. Parsley: And that's what people don't want to hear, you know. People want me to fix them. Now it's probably just cortisol, right, so you can do something for my cortisol, and this is going to be better, you know. It took you 20 years to shadow yourself, you know, get some time to put the pieces back together, you know. I mean it's a pretty complex puzzle at this point.

Robb: And, you know, and the interesting thing is the people who like to shadow themselves when they get put back together a little bit. They run back out and do it again.

Dr. Parsley: Yeah.

Robb: Like a split. And that's been something that I've had to learn not to do in the -- and our clients, you know, being kind of across the derivative gym.

[1:15:05]

We've had to rein people in and we've had trainers that we need to reign in, and stuff like that. And as we start getting them a little healthy again, then they will go and break themselves. So that's a tough -- that's a tough deal.

Dr. Parsley: Yeah, and it's one of the side effects of improving people's health is that improving people's health is -- they think their health...

Robb: They want to go do something.

Dr. Parsley: Their health enough to destroy themselves again. Like, well, you know, I'm coming to see you because I'm broken because I want to do crossfit three times a day and train for an ultra-marathon and be world-class power lifter and then working on all of those things while I'm finishing my online bachelor's degree and being a full-time seal.

And if you could just fix my cortisol, everything is going to be okay, right, doc? And no. But once I get them feeling little bit better, they feel like they can go right back for that routine. And you say, you know, "You might want to consider that the -- one of the ways is we fix your cortisol is to tell you, you know, do crossfit only twice a day, you know. You don't need it four times a day, you go down twice a day, you know. Get your met calm down there, something that would empower New York City for an hour, you know.

And you have to just reel them back in and let them break themselves again and then they realize they have to be reeled back in again and it's that constant evolution. And we all do it to ourselves no matter how well we know it.

Robb: Right.

Dr. Parsley: I'm keenly aware, you know, sitting at my computer three to four hours longer than I need -- you know, than I should be. And I'm keenly aware that I'm doing it to myself and I know the repercussions of it and I'm going to do it anyway just on that particular day, you know.

Robb: Right.

Dr. Parsley: Most of the time, I can stop myself but, you know, look how much education is coming to just me being able to start myself most of the time. And you take the lay audience and you teach them 1 to 100, and they're not going to be able to reel themselves back and nearly as frequently.

Robb: Right.

Dr. Parsley: Same with you and nutrition and exercise and all that. It's just the same kind of thing.

Robb: Doctor, we leave a stone and turn.

Dr. Parsley: Oh, I think we just kicked the first stone. It's cascading down and tapping all of the other stones that need to be turned.

Robb: Perfect. Cool. Well, we've been -- I've been threatening to have Doc Parsley on here for a long time. He's the kind of mystery dude that I said we needed to wait and we'd have him on. I think it was over a year ago that I had potentials of him being on the show. But now we finally did it, so.

Dr. Parsley: Yeah.

Robb: Next time we'll...

Dr. Parsley: Long time and coming.

Robb: Yeah, yeah. Next time we need to have you on with Greg because Greg's - - I think his inaugural podcast is possibly one of Doc Parsley's favorite lines for...

Dr. Parsley: Yes, yes.

Robb: We know it's burning down and Greg's is like, "How does this burn?"

Dr. Parsley: Yeah. I haven't listened to all of your podcast. I listened to that -- that's still the topline, Greg, you know, heads up, big prompts to you, keep them coming. But John Welbourn had some really good ones too.

Robb: Yeah.

Dr. Parsley: I remember specifically while he was -- somebody had asked, I don't remember if it was one of your, one of the questions written in by your store or it was something that Greg is with. But he basically went into this thread as to what Crossfit really does for you, you know.

Robb: Right.

Dr. Parsley: And what makes you a good Crossfitter. And I can remember sitting in my car nearly tearing up laughing as he went, you know, just reaping into sort of the mindset of people who go into crossfit, so. But, yes, Greg still has it for burning.

Robb: That's one line.

Dr. Parsley: Yeah, the best one liner. If John would have restricting himself to one line, maybe there'll be some competition. But he had, like, 10 funny lines in there.

Robb: See, Greg has a lot of head trauma, but Wellborn has had a shocking amount of head trauma. So you never get one line out of Wellborn and you never get the same story only once. You get multiple times, so.

Well, awesome, Doc. It's been great having you on. Hopefully the sound quality didn't suck too bad. If it did, it's free podcast, so go pound some things, you know.

Dr. Parsley: Yeah, absolutely. My pleasure. And I'm willing to do it again and again anytime. And hopefully, you know, one day I'll have my podcast and, you know, we can start pulling on some of the same guys to, you know, interlink our data, you know, or...

Robb: Nice.

Dr. Parsley: I don't know -- what do you call it?

Robb: The network?

Dr. Parsley: Our network -- our propaganda. We need to, yeah, spread our propaganda to multiple channels of listeners.

[1:20:04]

Robb: Thanks. Well, you guys are going to see a lot of really interesting stuff in the works from Doc Parsley. He's got his fingers in a lot of different parts. So we'll have some great stories to share with you all. And I think some techniques, technologies and stuff like that, they're going to help a lot of folks. So, more to come on that. So, thanks again, Doc.

Dr. Parsley: Yeah, my pleasure.

[1:20:32] End of Audio