**RedZone Podcast Episode #54: Human Performance, Mobility, and Endurance – with Brian Mackenzie, Best Selling Author and Expert**

[00:02:00]  
Bill: Brian, I want to welcome you to the show today.

Brian: Thanks for having me, Bill. Appreciate it, man.

Bill: I am super interested in learning a little bit more about what you're doing with ... What you're understanding is the power of breath. I'm going to take this a couple different ways. You have been exposed to some breathing approaches, breathing techniques. I want to hear about your perspective on what is going on that allows you to reach such a deep state during the breathing, and in between the breathing, that approaches a meditative experience.

Brian: I'm just going to rephrase this, or come back at you. You asked what I'm using with the breathing to get as deep as I'm getting?

Bill: Yes. What I'm really interested in-

[00:03:00]  
Brian:  
[00:04:00]  
Several things. One, I started with the basic, 10-week course with Wim Hof's stuff. I have a relationship with Wim Hof and Inner Fire, through xptlife.com, which is the website, the business that I have started with Laird Hamilton and Gabrielle Reese. That stated, Laird and I really started this about two and a half years ago, at this point, where we immersed ourself through the 10-week course, saw immediate changes. Saw immediate ways that we could apply this, started applying it, started playing around with it. Then, as I have progressed, I've started to understand more of the basic fundamentals of breathing, in itself. Meaning, specific mechanics representative of that. There's some deep layers in here, but the fact is, is it's like there are specific muscles that are responsible for initiating the diaphragm at first. Then, we can travel up through the chest. There's specific muscles in the back, the serratus anterior up front, serratus posterior up back, et cetera.

[00:05:00] We start to ... If you become aware of these things, there's way to get things to start to fire, or to start to feel these things. That's largely been my career. Not with breathing, per se, but my career had been about movement and understanding that. I've done a pretty good job with running, and running mechanics, and understanding that in A lot of sports, and a lot of movement-specific stuff, through human movement and human performance. I have to feel what's going on. I have to be able to articulate that, and maybe be able to cue somebody and get that out. What we've done, is we've more or less started to morph a lot of this stuff, to where we're starting activate things, whether I'm using a training mask to get activation out of something, or I'm using palpations. Or, I'm actually using other breathing practices, prior to using the Wim Hof method. The Wim Hof method is probably the basis, the foundation of what it is I do.

There are a lot of other pieces in there. I do a lot of apnea training, as well. A lot of the free diver stuff, a lot of the pranayama stuff, to where we're getting better at C02 retention. We're getting better at breath-holding techniques, we're getting expansion of the rib cage. We're starting to really train a lot of these muscles, and start to feel these things that are absolutely needed in better breathing mechanics. With the application of these things, I've learned how to more or less bring them together, and use them together. That's largely what we've been doing with XPT Life.

[00:06:00]  
Bill:  
When you say bringing these together, what's interesting is that my 13-year-old son is a high-level soccer player. For some reason, he went out and he saw something about a breathing mask. He went out and bought it. He bought the breathing mask. The other day, he was injured. We went out for a run together, we were trying to get a little training in. He goes, "I'm going to wear the mask." It was funny, because I'm not sure what happened, but he's a very good athlete. He was out there, way out in front of me, with this mask on. Then, he ended up falling way back to me, after a certain period of time. What is going on with that breathing mask, that you're coaching athletes on, to optimize their performance?

Brian:

[00:07:00] A few things. One, it's resistance. The great thing about resistance, there's good and bad things about that. Too much resistance can be detrimental, in terms of developing better breath-holding techniques. Building too much musculature around the breathing mechanics can inhibit the breathing mechanics where, what we're trying to do, even with the apnea stuff, is expand, open up, or thing mobilized. There's the negative side on it, which is why we don't use it necessarily every single day. The positives on resistance is it's triggering you to actually use that diaphragm immediately. The diaphragm is used ... Most people are not doing diaphragmatic breathing. Most of us are seated way too much, which is largely shutting us down. Unless you sit in perfect posture and know what you're doing, you're not breathing with your diaphragm. You're breathing through your chest and your shoulders, and that becomes a very detrimental thing.  
[00:08:00] A lot of people have been talking about this for a long time. By applying the training mask, you automatically will start to change that position, and start to use that diaphragm. I can get somebody to start to understand a lot of motor control issues that might be happening. By motor control, I mean technical issues. If we've got movement, or technique issues, we can largely make some changes with people by just utilizing the training mask in either a warm-up scenario, whether we're doing some sort of core warm-up. Or, we're even in a seated position, and we apply the mask and get them to breathe correctly for 10 breaths or so. Then, go into the breathing by taking off the mask and just applying that rhythm. It's something where throwing a band around the knees and activating the hips, getting the hips fired up. Same thing as what we're doing with the training mask. We found, early on, that getting a respiratory warm-up, with something like this, allows an athlete to develop a better warm-up.

[00:09:00] Then, lo and behold, the research starting coming out, following, and dovetailing that exact same thing. They're seeing if you get a respiratory warm-up, along with your normal warm-up, you're actually going to be better off for what you're going to do, if it has anything to do with more high intensity work. Since we'd like to do a lot of high-intensity work, that's become part of our staple warm-up that we would do a few times a week. Moving from there, there's also the CO2 adaptation. This is probably why this kid went out really quickly, and then started to fall really hard. That mask is trapping more CO2 inside the mask, so your indicator to breathe is CO2. Think swimmers, and it's during a swim season. I used to swim, and I played water polo as well. Beginning of the season, everything was always harder. By the end of the season, you didn't need to breathe as much. You didn't need to take as many strokes. This is the ability to process CO2 at a higher rate, which is also involved in fitness.

[00:10:00] The fitter we get, the better CO2-adapted we get. The body starts to respond that way. That was most likely what was happening to this kid. The CO2 caught up with him. He wasn't really ready for that, and he literally had to slow himself down, in order to keep up with the demand of how much CO2 was being held in that mask.

Bill: I see with that, also, when I was training for the Ironman, and doing swimming, the coach I had would say, "Hold your breath four strokes, or seven strokes, or eight strokes." It's similar adaptation.

Brian: Yep. Very, very, very, very similar adaptation. Thank you.

Bill: Excellent. As far as ... Feel free to-

Brian: Sorry about that.

Bill: It's okay. Take your time. I can edit thing out pretty easily.

Brian: All right, here we go.

Bill: No problem. What kind of dog do you have?

Brian: I've got two. One's a pitbull mix, one's a pitbull.

[00:11:00]  
Bill:  
We just lost our Doberman a couple weeks ago.

Brian: Oh, that's tough. That's tough, that's tough.

Bill: It's hard to see them go.

Brian: Yes.

Bill: When I was out in Poland, doing the Wim Hof training, one of the big things that came up was the proper breathing mechanics, through the diaphragmatic breathing. In the yogic classes that I attend, there's some teachers that are really deeply aware of the diaphragmatic breathing, et cetera. How do you teach someone to breath so they're not panicked all day long? That they actually have diaphragmatic breathing. Is it something you just have to become conscious of continually? Or, have you found a way to hack that so that you become more conscious of your breathing throughout the day?

[00:12:00]  
Brian:  
[00:13:00]  
Both. Yes to both of those. One, there's no reason why every human being shouldn't be practicing some sort of breathing practice. Regardless of if it's Wim Hof, or it's something else. I've just found, for me, that the Wim Hof stuff works great. My wife finds other things that work better for her, and lots of other friends like other things. That said, the ability to have a practice where you're spending 10, 15, 20 minutes, or more, consciously aware of what you're doing with your breathing, has a infinite response to that. I like to correlate it like this: breathing, and being conscious of it, is like peeling that ugly layer of the onion. Even though it doesn't seem like it would do anything, the fact that you become aware of that onion, and peeling that ugly layer, you're now opening yourself up to get deeper within the stratosphere of you, per se, and allowing yourself to start to venture into more of the stuff that's brought around the ego, or even how I'm moving, or how I'm breathing.

[00:14:00] The basics of understanding just how to breathe correctly, there are so many videos on the internet that people could Google about diaphragmatic breathing. The fact is, is everything initiates from that belly. The belly should pull first. Then, it follows up through the chest. We don't want to shrug, but we want it to travel upwards, into the the chest. From there, exhale happens, and it goes chest, back down to belly. The belly should collapse in and come back down. That doesn't mean you can't have a stable belly. By drawing in the lower abdomen, you still have access to the diaphragm. From a mechanical standpoint, if we're in any sort of anterior pelvic tilt, which a lot of people tend to be in, especially when they're standing, you don't have access. Running, for instance, most runners have a slight over-extension going on. Meaning, they're in an anterior pelvic tilt. They don't have access to their diaphragm.

[00:15:00] You really cannot initiate the diaphragm while being in this position. It's understanding, and getting that place where we're laying down on the ground, in a sit-up position with the knees bent, and the ability to draw from the belly first, maybe by just simply applying a handle on top of the belly. Then, allowing that to move upwards. Just practicing that itself can change everything. Then, it moves onward. As something gets more consistent, you get more serious about the breathing. You start to funnel into other breathing methods, or other things you could be doing. I have a saying with the teaching that I'm doing, especially with the Wim Hof stuff. There's really nothing that 10 breaths can't change. If you can get 10 breaths, if you're in a bad mood, or if you're not feeling good, or something's going on, just apply 10 breaths and see what you can do after that 10 breaths. Apply them fundamentally, from drawing from the belly, up through the chest. Letting go, letting the air exit, then going right back again and doing 10 breaths like that. I don't think I've ever seen somebody, probably 1,000 at this point, that I've been teaching with, that didn't see a positive response from that.

Bill: As an entrepreneur, I've been meditating for about 20 years. I've tried every ... I've been to zen monasteries. I've been all over the place studying different techniques. This is, by far, what you're explaining is the most direct hack to an hour and a half, or an hour, or 45 minutes of meditation that I have experienced.

Brian:  
[00:17:00] That's what I experienced, as well. At first, it was like, "Oh, great." Now, I could do 10, 15 minutes of breathing. I've got some great meditation going on in that period, as well. Now, I use the breathing, then go into some more meditation. I can get myself into a heavier space, then be able to just sit there and meditate afterwards, and be much more focused because we're shutting down all that over-thinking the logical brain. We're shutting all that stuff down, and teaching ourselves how to deal with a lot of the hormones, the catakinoids, like with the norepinephrine, adrenaline, the dopamine, and all that stuff coming into the system, which is a very primal, fight-or-flight type situation, and not letting that overactive mind have any access to it. We're actually just being very calm, ready, and steady, and being able to manage better decision-making. Whether that's in business, whether that's in personal life, or that is in a very life-threatening situation. Making really radical, really erratic decisions, is never a good situation. Sure, it can pan out sometimes. Most of the times, it doesn't.

Bill: I have had that same experience. In fact, the mood regulation part of this, I guess we could call it [inaudible 00:17:14] up and down. Just the most exposed you are in business, or more extreme jobs, or whatever. My experience is the mood regulation has become much calmer. Maybe that's also coupled with being in the ice, and the breathing together. I'm not sure exactly, but have you experienced that? Have you had people, of this thousand, that have talked about mood regulation?

Brian: 100%. Yep, absolutely. That's been a huge part of why I've stuck with this. It's just my reactive behavior, a lot of it's been suppressed. Some of it's still there, but a lot of it is has been ... "This is of no benefit for me to be reactive about this right now."

[00:18:00]  
Bill:  
We talked about the breathing. What about the ice, and the application of the ice and the breathing. Do you look at them as two independent things? Or, do you ... Clearly, they're independent. Do you look at the application of both together as a stabilizing force? How do you approach the ice, as you go about your training?

Brian:  
[00:19:00] Definitely, there's something that works together. They don't always need to. That said, I like how they work together. I'm going to go a step further, in saying we actually like to use the breathing, the ice, and heat. We like to take them all to the upper ends of where we can handle the cold, or where we can handle the heat, to just get the physiological responses. We're not necessarily going to get hypothermic because we're in too long, because we're then going to get into the heat. Inevitably, what happens is we start to make the physiological changes, and the adaptations to things. That said, I still do the cold training on its own. It's something that I've learned a ton from, in that it was a very, very scary thing at first, that I was doing. I wasn't able to do as much as I thought I could do. That's progressed. Now, it's understanding the reactive behavior to the ice, and not even having that.

[00:20:00] Basically, I can walk up to the ice, get into the ice, not have a single reaction to it, get into the ice, go through my time in the ice, and get out without ever having a single reaction that is negative. Whether I'm shivering, whether I'm freaking out because it's too cold, the fact of the matter is all those things are going to be present, potentially. Maybe not the shivering, because I've learned how to suppress that. The cold's always going to be cold. It's how you manage that with your head, and letting your head get out of control. The fact is, the first thing people do, when they get in the ice, is they react. They're like, "Oh, wow, wow, wow. Oh my God, oh my God, it's too cold. I got to get out, it hurts!" That's just the head. There's no reason why anybody can't handle that. Staying in a little bit longer, and then going and getting into the heat, and seeing how you can really get through that, really peels layers for people.

That's one of the profound things that we're doing at these XPT experiences that we put on, which we have one starting tomorrow in Malibu. We introduced this entire thing. It is, by far, of everything we do, it is by far, the ice is the hardest thing for people to wrap their head around doing.

[00:21:00]  
Bill:  
It is. I've been doing the ice training since November. Having gone through the Wim Hof videos, and then flying out to Poland, by far, the ice, coupled with the breathing, has been the most powerful, transformative impact. I'm going to link up to the XPT ... The programming that you have, I'll put that on our show notes page, so people have access to that to learn more about how they can get involved. Is the ice, when you have the ability to ... Basically, you're teaching people how not to panic. Then, how to breathe their way through it.

Brian:  
[00:22:00] Yeah. That's what the breathing is for. The breathing is there, like look ... Let's say you have reactive behavior towards your wife, because she upsets you about something. That's what the breathing is for, is to learn how to not do all of that. How do you apply this into your daily routine? The ice is there to do the exact same thing. It's how do you get over that reactive behavior towards the ice, and allow yourself to own in? The ability to go through it. There's two people up from Australia right now, that we ran into, that are getting ready for ... They got [cross 00:22:12] games competition.

They're in town, and the guy, it's winter down there. He said it's freezing, and he's looking for a place to do some heat. I have a sauna, and I told him to come up. We could do some ice and heat. They don't necessarily do the ice training. I set him up to do the ice training, and I showed them how to do it. They absolutely killed it by understanding not to react to the ice. They were both dumbfounded how much easier it was to get through that, by not reacting to it. They were just baffled, because she was like, "Fuck, it didn't feel like..." Excuse me. "It didn't feel like it was that cold." I was like, "Right? It was like 30 degrees."

[00:23:00]  
Bill:  
It's stunning. Also, for the listeners, is that this is not about some macho, run-into-this-and-run-out, like one of the cold plunges in the northeast. These cold plunges, where you jump in for four seconds. This is a very conscious entering-

Brian: Yes.

Bill: Right?

Brian: Yep. It's very, very conscious. It's very, very aware. I also like to show people, "Hey, stick your hand in the ice right now, without doing any breathing. Feel that. Now, do 30 breaths, then stick your hand in." They're just like, "Whoa! Why didn't that hurt as much?" It's like you're suppressing the pain receptors. You're raising the PH, so you're not allowing the pain receptors to be as reactive. You can literally handle more than you typically could.

[00:24:00]  
Bill:  
You probably know much more about this that I do. The vagus nerve, I would love to hear what your take is on the vagus nerve, the breathing in the ice, and how you've been able to piece it together. It seems like you've made a career out of piecing together these disparate technologies, human technologies, and pulling them together.

Brian:  
[00:25:00] Yeah. I've done a fairly good job at some of that stuff. A lot of vagus nerve stuff is going to have to be done through the nose, which is why a lot of the stuff in yoga is done through the nose. You're getting that connection through the nose. There's also techniques, like the Tibetan chant, where you hear the Tibetan meditation stuff, where you're hearing mmmmmm. That is vagul nerve stuff. You are literally vibrating sound off the roof of the mouth, and using the tongue to generate the different movements and create a calmness that goes through that vagus nerve, and literally transcends down through, into the diaphragm, around the heart, the lungs, all of it. If we get somebody in the ice, we typically will get them to nose breathe, to just slow it down. Do slow, controlled nose breathing. Let that happen. Lo and behold, they just start to calm down much quicker.

Bill: Interesting. A nose breathing, basically is a way to activate the vagus nerve, and bring more of a settled state to the brain, and to the body.

Brian: Yep.

Bill: I'm going to take a bit of a leap here, but I know you'll be able to track with me on this. Steven Kotler wrote the book "Rise of Superman". I'm sure you're aware of this-

Brian: Steven's a friend, yes.

Bill:  
[00:26:00] Oh, okay. Great. I'm hoping to have him on the podcast next month or so. I'm also heavily into the technology world, with Singularity University, and Exponential Technologies. One of the big areas is neuroscience. I've been very interested in the flow states, and achieving flow states, being an athlete myself. Would you consider the state that you are able to achieve from the breathing, the ice, and the approach of this, and the reaction you get from people, to be slipping into a flow state?

Brian: 100%

Bill: Okay. Steven talks about-

Brian:  
[00:27:00] I just did a two-hour talk on Sunday at a yoga shalla down here. I show up once a month, and we do some breathing stuff. It's got specific topics, and the topic this last Sunday was flow. How we would use the breathing to get there and stay there. The breath-holding, the exhale retention is maybe not the best idea if you're going to go into some athletic event, because it's pulling out all the oxygen. After you do the breathing, you're pulling down the oxygen again, and then having to bring it back up. That said, we're still using the breathing to get up and get into these states, we're just doing less of a retention. Then, we're able to stay ... The idea is that you're focusing on what it is you're about to go do, regardless of what that is. It doesn't even need to be a sport. It could be going to work. Like, "Hey, I'm driving to work, and I could be doing to some breathing." I just get myself into a mode to concentrate on the task at hand that I want to accomplish. Then, I'm setting myself in that focused motivation.

Bill: That is something that I totally, totally I get. I took a bit of a risk asking that question, but I think that, without a doubt, I feel like I'm in a flow state when I'm tapped in.

Brian:  
[00:28:00] Yeah. We're doing this stuff with Laird all the time. He's doing it before he's toeing into ... Massive waves. He's out there breathing the whole time. I've probably worked with, I don't know, 20 professional surfers, at this point, some of the top guys in the world, and I would say 80% of them have stated immediately, "This is exactly what it's like when I'm barreled." You can almost make a decision, prior to having to make a decision, and seeing into the future, and being able to be in that place where you need to be, when you're just ... It's like time doesn't exist. I'm like, "Flow." They're like, "Yeah."

Bill: Gotcha. The mechanics of that, from the surfing point of view, from the Wim Hof piece, it's that full breath in, then that half breath out. Full breath in-

Brian: Yep.

Bill: Then, you exactly completely. Is that what you're referring to, on the [full 00:28:48] exhale, when you-

Brian:

[00:29:00] Yes. Actually, in the full exhale retentions, we don't do them as long when we're getting somebody ready to go compete or train. If you that, you're just draining out all the oxygen. You're just basically wearing ... That's why it's such a ... If you do a bunch of exhale retentions, you feel wiped out afterwards.

Bill: Sure.

Brian: That's why. You're draining out all that O2, versus keeping all that O2. We'll do less than one minute breath retentions. Then, we'll do a 10, 15 second inhale retention to reset the system, and the go right back into it. We set that up to where we're getting somebody ready. Or, I'm just having an athlete breath on the start line. Just getting the O2 up, and getting the PH up. Then, the gun goes off, and they don't feel anything for 45 seconds.

Bill:

[00:30:00] I went to my Spartan training today with the group that I meet with, and I listened to you talk about nose breathing, as it relates to going through a workout with just doing nose breathing. First question is how do you do that the entire session? Then, what is the benefit, other than I'm feeling my belly getting, focus in my belly. Is that what you're trying to do with that nose breathing, is that get that deep, diaphragmatic inhale?

Brian: A few things. Yes on that. Then, there is getting you to be able to handle slowing the breathing down, and getting into more of a rhythm with what it is you're doing. I don't think it's something you need to be doing all the time. I think it's something you maybe are doing once or twice a week, but the ability to slow yourself down. For instance, with Crossfit, they have their Crossfit Level 1 seminar. I've done a ton of them. I used to teach at them. I'm not longer involved with Crossfit, but a buddy of mine and I, Kelly [Storat 00:30:48], had to go back and redo the level one certification. It had been five years since we had done it.

[00:31:00] We went back, and we go do it. We played a game with each other, that we would do the group workout, which was thrusters at 95 pounds, and burpees. It was 21, 15, 9. The deal was you could only breath through your nose. If you didn't, if you stopped breathing through your nose, you had to stop. I went through this. I was, by far, not the fittest guy in that room. Not even close. There are a lot of freaky kids coming up, that have been doing Crossfit now. I probably finished in the top five of the entire seminar that did that, because I was breathing through the nose, and because most people just go off the cuff way too fast, and blow themselves out. Then, are so slow, versus being steady, paced, and being able to find a rhythm.

Bill: Interesting. Basically, your body is fully utilizing oxygen the whole time. Basically, you're not putting yourself in debt.

Brian: Yes, exactly. That's what we're doing with the breathing, prior to doing any training. You're getting ahead of the game already.

[00:32:00]  
Bill:

[00:33:00]  
Let me transition to the topic of mobility. In your book, "Unbreakable Runner: Strength and Conditioning for a Lifetime of Running Strong" ... My brother is a four-minute miler. Now, he's older, but he's a 4:30 miler. Another one is a 250 marathoner. I myself, I'm not too bad when it comes to running. The issue is the injuries. You brought this up in the book. What is the top three pieces that are most important for mobility, when it comes to not the strength piece, but the way you roll out tissue, using lacrosse balls and stuff. Can you explain that for our listeners?

Brian:

[00:34:00] Yeah. I did a post on this recently, about what my dogs do after we're done playing. It's very different from what we do. In fact, I'm looking at my dog right now, who was barking in the background earlier, who's now laid out. We just took him to the pool, I threw the ball, and they jump in the pool, grab the ball, bring it out. They are literally both laid out asleep right now. They're literally wired to shut down after they've just played. We are wired to continue to do other things, and not recover. Obviously, nobody's going to sit there and go, "Okay, I don't have the time. I'm not going to go just lay down and take naps after every time I go and train, or I workout, et cetera." Well, if you're a professional athlete, that's literally the best thing you can do. I can tell you, from firsthand experience, from probably 15 different sports, that the best athletes in the world, that is what they actually do.

[00:35:00] That being said, sleep is primary, rest is primary. The reason I'm correlating this back to where you're asking about the tissue, and rolling out, is when does my dog ever roll out? He doesn't. Yet, his tissue is supple until the day he dies. Why is that? My dogs are highly active animals. What we are trying to do is get the tissue back to optimal. Meaning, there is no pain in the tissue. If I were to roll on a lacrosse ball, anywhere in my body, I don't have pain. There's no pain. If there is pain, that's a problem. That is your tissue telling you that it's not getting enough nutrients. It's definitely not getting enough oxygen. Getting that tissue to open back up and become supple, like a dog's tissue, is ideal. Taking a lacrosse ball, or a roller ... Most people would probably need to start with a foam roller and progress through that. Be able to get into things that are denser. I brought up Kelly Staret earlier. He has a saying, that, "Any human being should be able to stand on top of your quads without you being in any sort of pain whatsoever." I would say 99% of the population can't have that happen.

Bill: The book, he writes extensively about ... I know what you're referring you.

Brian:  
[00:36:00] We are not optimal. We think we're optimal. Let me just lay this out. You brought up "Rise of Superman". Take the 100-meter sprint. In 1912, that 100-meter sprint was 10.8. right now, Usain Bolt hold the record at 10.58, I believe. The guy who won it in 1912 was wearing some weird, unorthodox shoes. He was on a, I'm getting, cinder track. He was in a P.E. kit. Now, we have Usain Bolt, and everything specialized, specialized training plans. This guy has no salary, I'm guessing. Bannister was going to medic school when he broke the four-minute mile. Yet, 27 people after him broke it in the next year, I believe. Something like that. It's all in "Rise of Superman" as well. The 100 meters, I don't think is.

[00:37:00] Steven Kotler talks about diving, and how diving did a full 900 back in the early 1900s, and how it took 100 years to actually double that. Whereas, you take snowboarding, you take free skiing, you take professional surfing. These guys have literally, there's no figures on statistics for the advancement they've made. We get stuck in such dogmatic places, thinking that it's all about doing more, more, more, more, more, and aren't paying attention to history, more or less. Chris McDougall write another great book on ... It wasn't as good as the first book about the barefoot runner, or the [crosstalk 00:37:13] Indians. The second book-

Bill: The one in Greek, that was based in Greece?

Brian:  
[00:38:00] Yes. His second book, "Natural-Born Heroes", is all about these things that people used to do 50, 60, 100, 200 years ago, that nobody's talking about anymore, that nobody's even achieved. You can't get an ultra-marathoner to go 10 miles without taking some sort of goo. Yet, there were guys who were running back-to-back 50 milers with nothing but water. How are they doing that? They're not ingesting a crap-ton of sugar, and getting their body ill-adapted to something they don't actually need to use to fuel themselves. They just think they do, because somebody's selling them on something for optimization. Yet, there's 1,000-pound rock or so that nobody's picked up in 200 years, or something. There's just things that we're not thinking about and seeing, back through time. It's like, "Look. If this guy, back in 1912, who was running the 100 meters, if he had two $20 million a year salary, and was specialized in everything, and had a serious training program, do you think Usain Bolt would still beat him?" I don't know. Nobody knows, because 1.3 seconds ain't that much over more than 100 years.

Bill:

[00:39:00] It's funny. When I got done with my Ironman, I think I was 194. Once I started this different training method, I wish I had been doing this when I was doing the Ironman. I now weight just about that amount. I thought, "Why was I so fat during my training?" I was taking so many carbohydrates in. Is it so specialized nutrition? Or, can you actually follow some general protocols to get your set point right?

Brian: Principles, man. It's all about principle.

Bill: Really?

Brian:  
[00:40:00] That's it. There's no one program that is going to do squat. What's entertaining right now, is in the Crossfit world. A lot of people came into Crossfit, and all they knew is paleo, or low-carb diet. That's all they ever knew. Then, all the sudden, they heard about high-carb, and these athletes having phenomenal results on high-carb. They think they've found this holy grail of nutrition by using high-carb. Yet, they don't understand that we were there 10 years ago, 15 years ago. We were doing all that shit. We were playing around with all of that. The fact that you don't understand how to live by principles, and think that there's these cheat meals, and there's these other things. This just goes into lifestyle. What's your lifestyle? What are you doing when nobody's looking? What's your lifestyle about? If you think eating something, that you wouldn't normally eat, is okay to eat why? Because you're training, or doing a competition, there is just something fundamentally wrong with that. If I'm not willing to eat sugar while I'm in a normal lifestyle of my diet, why would I ingest that while I'm training, or competing? There's no real reason.

Bill: No excuse.

Brian:

[00:41:00] There's none, at all. The principles are this, that we life by, really. There literally is not enough vegetable matter that you can eat in a single day. There's an infinite supply, that starts at zero, every single day. Your job is to get as much as you can of vegetable matter. High-density, leafy greens are obviously the optimal, because they're most nutrient dense. Then, there's lots of stuff in between, and lots of fun stuff out there. There's superfoods, and all this stuff. Then there's, "Hey, what am I getting for my protein sources?" We know, based off of everything we've been doing, that animal protein is the highest density, if it's been humanely ... Non-stressed animals. Animals that eat what animals are supposed to eat, like grass. Not grains, not things that we're trying to pump them full of. We've got pastured animals, or wild animals, things like that. You don't need to do it in excess, either. It's not like most people I meet are eating way too much protein.

[00:42:00] They're eating far more protein than they actually need to. What happens to excess protein? It's converted to glucose. You're basically just upping the sugar content of the system. Then, it's high-quality fats. Where are you getting your fats from? Are you afraid of fat? Are you still living under the guise that the high fat is going to give you heart disease? There's nothing out there that shows that. It's all related to lifestyle, and what it is you're doing. Yet, the correlate that we've seen, over time, has been sugar. I think that it starts there, where it's like, "Hey. Sugar is number one culprit." Number two would be processed foods, which sugar falls into. Getting rid of these things, and just starting from eating real foods, things that were alive, especially relatively close to being eaten. Hydration is a major thing. Most people are well dehydrated, they're not drinking enough fluids during the day.

[00:43:00] My day starts with drinking water, starting with a tall glass of water with a little bit of salt in it so that I can absorb it correctly. It's living by these standards and understandings. If you're going to eat bread, things like that, get high-quality bread. What's high-quality bread? Well, somebody who hasn't stuck an alternative yeast, or something in there to ferment it. Letting it ferment on its own, and having a high-quality bread, is far different than something that has been processed and altered from the way that it's going to. Not saying that anybody should really be eating a ton of bread, but not everybody is gluten-intolerant. I think Michael Pollan has done an incredible job with the series that he put out on Netflix called "Cooked", which is a must-see for a lot of people. I would say, even just based off of the way my wife and I eat and live our lives, that series that he did with "Cooked" is right in line with how we live and eat.

Bill: Mike Pollan is the name there?

[00:44:00]  
Brian:  
Yeah, Michael Pollan, who wrote, what was it? Was it grain ... No, it wasn't Grain Brain. Was it Grain Brain? He wrote some great stuff.

Bill: Yeah. I can take a look quick, too.

Brian: Yeah.

Bill: Mike Pollan. While you search that, I have a question for you on ... Maybe it's just easier for you, in the West Coast, maybe you just tapped into this community. I went to my doctor, and what I found unique about your work is that you seem to tap into what is the current state telling me? What is your body telling ... What's the current state of your body? The blood, I'm using the wrong words, but if I had to submit my blood and urine to a lab, what is it saying about my health, currently?

[00:45:00]  
Brian:  
Yeah. What's your doctor asking for you to get? Does your doctor even understand ... We just had this conversation yesterday-

Bill: I had to walk away from my doctor, Brian. I had to go find someone else. Then, basically he came with, "Here's a bunch of foods that are [inaudible 00:45:12]. Stop eating the food." Then, I went to another guy. He said, "Listen, forget both of those doctors." He put me on this protocol to basically reboot my system over three months. What is your philosophy about that? How do you get people to the right people, to get the right information about what their health is currently?

Brian:

[00:46:00] Ultimately, it's going to come down to you understanding these things. That is ultimately what it's going to need to come down to. The fact that you ask questions of your doctor that he cannot ask, yet he's [diviying 00:45:44] out advice on shit that he shouldn't be giving out advice, because he doesn't have the background or the understanding of it. Which, doesn't make me anymore professional than him. The fact that most doctors don't even have that, and you had to leave your doctor, yet this guy's handing out advice to people, for what? He doesn't understand. When they don't know the lipid profile of the density of LDL cholesterol. A friend of mine just asked that of his doctor, and he's like, "Yeah, I guess we should test for that." He's like, "What do you mean 'I guess we should.'? How come I'm asking you this question, and you're not telling me that?" Then, it comes back, and he was told that his cholesterol was too high.

[00:47:00] Then, the density of his LDL is really low, and he's just fine. He's like, "Oh yeah, I guess I should be doing that." Why aren't you doing that with every single patient? Why would you be giving them advice on something that's not true? This is just how it goes. It's really you getting an understanding of what the bloodwork should look like. Here's another, throwing a curveball into here, as well. A good friend of mine, who's a doctor up in the Bay area, works with a lot of the Silicon Valley guys. One of his patients decided to do a blood lab on allergies to food. He did it, and he got it back. He was allergic to a bunch of stuff. He's like, "You know what? Just for fun, i'm going to change my name, and I'm going to get the bloodwork done again." He did that. Two weeks later, he had blood drawn, and two weeks later, he got the results. He was allergic to a bunch of new, different stuff. Isn't that interesting?

Bill: Crazy. That is crazy.

Brian:

[00:48:00] Yeah. We're just scratching the surface of a lot of things. I'm not claiming to understand any of this, but I do ... I try to pay attention to what's happened before, or what's happening within nature. What would nature be doing? Sure, we can grow the same foods year-round now, because we can create a greenhouse. We're doing specific things. Looking at foods, in terms of seasons, and understanding real food, if it's diverse, if you're eating a diverse diet of real good, I don't think you're going to run into too many problems. If you're on a lot of different medications, I would be questioning why you're on those medications, and what those medications are doing, and how you can actually get back to ground zero, to where your body is developing the things those medications are probably trying to do.  
[00:49:00] If your doctor is telling you there is no road back to that, I'd find a doctor that wants to find a road back to that. I'd find somebody who wants to find you a road back to not being on a medication I just took two kids, two guys who are in medical school, on the East Coast, who came out. They're interning this summer with a PhD buddy of mine up at Cal State Fullerton, Dr. Andy Galpin. I took them through the breathing stuff. Right before we were taking them through the breathing stuff, both of them were telling me how bummed out they are with how they're teaching them what they're learning. That everything is just about prescribing somebody something, versus trying to figure out a way to get people back eating real food, and understanding that. It's sad, because this is the world we're living in now.

Bill: Literally, out of her mouth was, "I only deal with stuff that has scientific evidence." That came out of her mouth. What I'm encouraged about, is a) that when I listen to you, and others, or leading this charge and have protocols and [ways 00:49:36] of going about this, I know we're not quite there with the health system yet.

Brian:  
[00:50:00] Yeah. The simplest way is actually to get your genetics tested to understand, from a genetic standpoint, what you're predisposed to, what you're not. What can maximize your gene ... How do you express your genes to the fullest potential, and how do you suppress certain things? What foods are related to that? What diet would be related to that? Is there a way to manipulate things, and do things within the natural spectrum of things, in order to get there? Getting your bloodwork done every year or two, from a doctor who actually unequivocally understands all this stuff far better than you, that's what I do. I use a guy by the name of Dr. Justin Major, who's in the Bay area. I don't know how many people can use him, because of his schedule. Things, like Wellness FX, which does blood draws, which has these things, can direct you to doctors and people who are very open-minded and much smarter than me, and who are on this path to want to understand how to get the human race back to a better place.

Bill:

[00:51:00] I just love this. Again, you're dealing with the technology of the body, and working with people on this, in a way to optimize human performance. It's just refreshing to hear that there's alternatives-

Brian:  
[00:52:00] Yeah. It ultimately comes down to feeling, too. Once you've learned how to clean things up, if I go crush some cupcakes, cookies, or something, what I feel after that is far different than what I used to feel. It's like when I used to drink, I would drink, and it was like, "Okay, I'd be hung over, but I just continued to do that." Or, when I was eating really high carb, and trying to get as many carbs as I could in because I was an endurance athlete, and I needed all this stuff, I couldn't understand why I was carrying body fat than I thought I should be, because I was training as much as I was. Yet, when I cut all that out, oh my God! How good did I feel? The response to when I actually did eat like crap, or I did something, that's training as well. That's life. It's like how do you feel? Do you feel what happens when you breathe? Do you feel what happens when you ingest something? Do you feel? When you start to really get down to it, when you can feel, you're at the helm. You are running the show.

Bill: In response to the feeling, do you ever have people, when they have urges for hunger, or urges to eat, potentially need to be doing this protocol of breathing, and abate the hunger that way? Have you had that experience at, with anybody?

Brian: Wait, say that again? Sorry.

Bill: I was curious, I have experienced myself, that when I'm getting super hungry, like around noon time, I will use the Wim Hof breathing, and I feel my hunger satiate. I feel like, "You know what? You're fine. You don't have to panic about eating right now."

Brian:  
[00:53:00] Yeah. That can happen. You can also get pretty hungry after doing it, because the mitochondria get spun up so hard. It's almost doing a workout. A lot of people talk to me about it, and they're like, "Wow. This seems like it would be great for people who don't exercise." I'm like, "This is the first step for people who don't exercise, is to actually start breathing, and get your mitochondria spun up." Mitochondrial bio-genesis occurs within the breathing. You're developing more mitochondria. You're developing a more robust mitochondria. Start burning more fat to start utilizing fat and oxygen more. It's free fitness, per say. I'm not saying it's totally free fitness, but it will start to develop those things. You can start to develop more of an aerobic ability with the breathing alone.

Bill:  
[00:54:00] I totally agree. I just have two questions more for you, Brian, as we can get wrapped up here. It seems like you help break down conventions of what we've learned through the years and help us look at it from a different lens. One of the pieces was heart rate training, for myself, is that old traditional from Penn State, when I was running track there, it's 220 minus your age. You take a percentage of that, and that's your ideal heart rate. Then, you've got Phil [Maphatone 00:54:12] doing his 180 minus your age, and that method. If someone's using a heart monitor, is there general principles, like you were referring to earlier, like principles of food. Is there principles of heart rate that you tend to counsel people regarding?

Brian:  
[00:55:00] Sort of. We do some metabolic testing, to where we'll show people where they're deficient. My goal is to get people removed away from ... Technology has its place, but I think technology, what's happening is, and this goes back to this feeling thing, is we're starting to dumb ourselves down to communicate with technology. That is a cataclysmic mistake. People come to me all the time about heart rate variability training, all of that. I've used it, I've played with it. I've tested athletes, we've done recovery protocols. We've created algorithms, and I got to tell you right now. The number one thing to deal with, with understanding your own body, is feeling. The ability to understand your mood. When your mood is high, and you're ready to do something, and you want to, and you're motivated, and you're in it, it doesn't matter if your resting heart rate's high or low, or whatever. The athlete still performed at the highest level, that were at the highest level.

[00:56:00] Then, there were days that the mood changed, but the resting heart rate was good, and they weren't doing things. The 220 minus age thing is absolute hogwash. It should be eradicated. It's just something they're using for general public-type stuff. Through the metabolic testing, we show people where they're deficient, where they could use some metabolic changes, whether they need some more fat adaptation, or where their fitness fails, their [lactate 00:56:05] threshold, where their aerobic threshold is at. These are just small markers that we correlate by using the heart rate, and getting people to understand what the feeling is when they're at those markers. That way, those markers, on certain days, you're more rested, those markers are going to change. Your heart rate's going to be able to go higher. On certain days, when you're not as recovered, and you decide to go out and train, those markers are much lower. It's a moving equation on a daily basis. It's not a one-thing-fits-all. It's understanding all that stuff, and being able to feel where those changes start to take place.

Bill:

[00:57:00] I love it, I love it. My last question, Brian, is related to happiness. I've heard you talk about happiness briefly. I would like you to just, if you can give, for me and my listeners, what your definition of what, in today's culture is, and for yourself, what it means to be happy, as a human being. How would you answer that?

Brian:  
[00:58:00] I recently listened to something by Mike Rowe that he did on passion, and I think it's probably one of the most important things anybody should understand. Happiness is not about picking something that you're good it. It's identifying where there's a need for something, and where you can help. I got into the industry I got into by mistake. I literally decided to sign up for an exercise science class in community college, at a time when I had been in community college for six years, on and off, never being able to make a decision about anything. I had more credits in odd classes, and odd things, than anybody I'd ever had. I worked as a maitre d', I'd bus tables, I'd washed cars, I'd done a lot of shitty things. I enjoyed my time in doing all of those things as much as I could. Then, I landed into this place where I was at, and I identified a need. I identified that I was good at something, and I could make a living at it. I was happy doing it, most of the time. I literally took something, and was able to apply passion to that something.

[00:59:00] That's more or less the moral of the story of finding happiness, for me. Go to the third world. There are people who are so much happier than people that I see on a daily basis, and they have nothing. Absolutely nothing. It totally opens this entire thing up to, "What are we really motivated by?" Money is something we all, unfortunately, need to make in this country to have somewhat of a living. That doesn't mean you need to be frivolously spending money. The fact is, it's like, ... Maybe that's what makes you happy. Go for it. Just make sure it's not a short-term thing. The fact is, I think it all comes down to what you're doing for other people, and where you find that need. That's what a job is, and that's what things are. That's what life is. Any religion talks about it. It's all about helping other people. Every spiritual practice talks about it. It's about letting go of self. It's you getting into something, making the best of it, and nothing thing that I need to be doing something specifically.

Bill: I love the message. People can reach out to you, to learn more about your books and XP Life. Brian, can you give the-

[01:00:00]  
Brian:  
Yeah. Xptlife.com, or powerspeedendurance.com. All that stuff's there. The big two books by Michael Pollan, he's got a bunch of them, but "The Omnivore's Dilemma", and, "In Defense of Food" were those two books that I was talking about. They're phenomenal pieces. He also wrote the book, "Cooked", but there's a series on Netflix, I think it's a must-see by a lot of people. At any rate, I don't typically get on a Michael Pollan [inaudible 01:00:25]-

Bill: No, no, no, that's good.

Brian: They're great reads. I think Steven Kotler's book on the rise of Superman is an absolutely necessity for anybody who thinks they understand athletics, or understand sport. Start to really look at things in a different light. How things are progressing, and how certain things are not whatsoever.

Bill:

[01:01:00] What a great message. I appreciate all the resources, and your message on passion and happiness, and the resources in the books. This has been great. I wish you the best with getting things launched with XP Life, with your pieces with Laird and [Wim 01:01:03]. Good luck with that.

Brian: Thank you. Thanks, Bill.

Bill: Yep. Have a great day.

Brian: Thank you. You too.