The Primal Blueprint Podcast – Episode #40: Interview with Ben Greenfield, Author of Beyond Training

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Brad Kearns: Hello, listeners. Today we have a wonderful very special guest, Ben Greenfield. Welcome for the first time to the Primal Blueprint podcast.

Ben Greenfield: I feel pretty honored to be called both wonderful and very special.

Brad: Well, we have really liked your stuff and have been associating with you for a while now. You and Mark have been exchanging great communication because of your being at PrimalCon Tulum in March. That was first PrimalCon experience. Tell us how those things went down there in Mexico.

Ben: Mexico is pretty cool. Actually Tulum I really liked. Most of my time in Mexico has been spent with brief forays off of cruise ships into questionable areas of town and also having my watch and debit card stolen in Tijuana. So you can only go up from there. And Tulum was a pretty cool experience. We played on the beach and did workouts out there in the mornings. Having the speakers out there was great. I just have to make it to another PrimalCon now.

Brad: What we had down there was kind of casual vacation type experience but after spending all that time with fun in the sun, we retreated to air-conditioned lecture hall for a series of afternoon lectures. You came through with the big one.

[00:02:19] One of my favorite things about your style in that particular presentation is it was just rapid fire. You were sending off so many tips and tricks and nuances about performance and recovery. Your book, "*Beyond Training*" is of similar style where it goes into a tremendous detail on an assortment of topics. It seems like your big picture is how to support and promote health when you are pursuing ambitious athletic and fitness goals.

Ben: Exactly. It is how to strike that ideal balance between health and performance. How to view your life through the lens of maybe not just ticking off the box or putting a notch in your belt or whatever.... completing an Ironman or going to the cross-fit games or doing a Spartan race or whatever but also trying to live as long as possible. We want you to be as healthy as possible on the inside as well as the outside while your are doing this thing. That is kind of what I am big on these days. I have kind of started to think more that way about my performance. It seems like about the time my kids were born while I realized that I really did want to be around them for as long as possible and to be around to see my grandchildren hit a home run. All of a sudden I started to get a little more serious about figuring out ways we need to do to do that grueling type of endurance feats that I like to do but I like to do so with doing as little damage as possible to my body.

Brad: I relate because I was on the professional tri circuit as you know. Now looking back as a father and having all this perspective, having been removed from the racing for almost twenty years now, I think some

of my favorite workouts were drafting the city buses in downtown Sacramento and trying to hang for eleven miles through all the green lights at the whisker of cheating death or descending the hills in Nice at the annual Nice triathlon. You are either going to catch the guy or fly off the edge of the cliff. Some of those decisions need to be recalibrated when you step back and look at the big picture.

Ben: Yes. Even if you are not chasing a city bus or bombing down the slopes of France, you can, just by structuring your training unintelligently or by fueling the wrong way during exercise, or perhaps not tapping into smart training, but just training harder, you can just kill yourself a little more slowly than getting hit by a bus. But is still just another example of a way that you can be pursuing performance in the absence of simultaneously pursuing health goals.

Brad: [00:05:19] I am excited to get into that a little bit. I am also excited to have you on the show because we get to tease Brock Armstrong. I have to thank you for giving us this referral to the guy in Canada at Frozen Puck. He turns out to be one of the most amazing multi-talented sound engineer, podcast host, and now the narrator of Mark's Daily Apple. I don't know if you know this. He narrates all of Mark's Daily Apple so you can basically listen to Mark's Daily Apple now days, thanks to Brock. Let's try to make a bunch of mistakes burping sounds so he really has to work hard to process this show.

Ben: I'll drop as many "F" bombs as possible to keep Brock busy. Yes, Brock has been a faithful podcast sidekick host of Ben Greenfield Fitness for two years now. He's great. Hi, Brock.

Brad: Hi, Brock. Let's have a moment of silence for the sound engineer to get his.....???
[00:06:33] Mark and I are standing back here many many years removed from the tri-scene. And you are right in the thick of it now. Let's talk about how things have progressed in the technology side and also in general physiological side of training methods and prevailing thoughts of how to do these extreme high intensity sports.

Ben: That is obviously a loaded question just because it has gone all sorts of ways. But stepping back and looking at the big picture, the amazing thing is the folks riding their $12,000 to $15,000 bikes down the Queen K highway at Ironman Hawaii, the super bowl of triathlon, the world championships on the big island. They are not going that much faster than some of the guys like Mark Allen and Dave Scott on their old steel bikes back in the day. They are going as fast or faster, but maybe not working quite as hard because they able to access a little bit better technology...aerodynamic technology, but I think that the kind of old school triathlon seemed to have a little bit more propensity to dig into the pain. Dig Deep. Go hard. Beat up the body as hard as possible and keep your fingers crossed that it will bounce back. The person who didn't crack first would win.

I do think that people now are training a little bit more intelligently. (No offense, Brad.) You have got those using things like rest wise and heart rate variability now to track things. Everything from hydration status to heart rates to weight to heart rate variability to blood panels. Athletes are getting a little bit more tuned to that process, or at least their coaches are. I am staring to see a bit more of that in the industry. People are beginning to get a little bit more into the health aspects. There are companies such as Power Bar and Gatorade, etc. who are the forefront of endorsed nutrition but people really are realizing that they can get through a race on something like chia seeds and amino acids and a little bit of raw honey versus maltodextrin fructose and Franken fuels. I think that nutrition is progressing a little bit as well.
And then, of course as far as training tools to enhance the physiology such as using hypoxate training chambers and elevation training masks and power cranks which are independently functioning bike cranks that allow you to train your efficiency and economy, your pedaling stroke a little bit better. To front mounted snorkels to focus on your swim efficiency. There are all sorts of new training tools that have cropped up that make things a bit easier too. It kind of spans the gamut.

Brad: [00:09:47] The idea of training smarter obviously is huge. In our day without the high tech elements or the breakthrough such with things such as heart rate variability, it was meant to, in my opinion, who was the most intuitive and who was the most in touch with what their body really needed, that was someone who could suppress the demands of the ego and competitiveness instincts that were misaligned with the proper decision for that particular training day and could harness those competitive instincts into race. My

sense is that none of the aforementioned is high tech. It still seems like there could be a place for just a sensible natural type of approach in complement to all these new tools.

Ben: Yes. That is where I try to strike the balance. For example, you could be using self-quantification devices, whether you are a triathlete or a bio hacker or general fitness enthusiast all day long these days. Bluetooth enabled devices that allow you to consistently measure breath rate, perspiration, heart rate, heart rate variability, skin temperature, you name it. But there are two issues here. The first is I am not a fan of being tied down to Bluetooth signals all day long. Yes, they are a less potentially damaging signal to the electro-chemical gradient of your cells, than say something Wi-Fi from a cell phone or a microwave signal in your kitchen but there is still a signal that I have yet to feel comfortable about having on my body 24/7. So I use a heart rate variability measurement tool but I use it for five minutes every morning. That is it. That is my use of Bluetooth technology for the day.

The other reason is...I am a blogger. I am a podcaster...I know a lot of listeners probably work on computers during the day. They work with technology. They stare at screens. They are handcuffed to technology during the day and sometimes it is nice to just cut yourself free at the end of the day or at the beginning of the day. Go you your workout combat style without being tied down to technology too much. I do think there is a benefit to listening to your body but I like to get a little bit of both. I like to check in and get my heart rate variability in the morning, do my quantification that way, do most of my training sessions without being tied down to technology. Then occasionally when I have key sessions where I want to do a once every two weeks like a test to measure my power at lactic threshold I will want to use a power meter. Or I want to measure during a track session, I will want to measure my anaerobic heart rate is, like where my heart rate threshold his where I can get a feel for how that is progressing. There are certain situations in which technology can come in handy but I think it is a delicate balance listening to your body and using all the technology and the self-quantification tools that we have available to us now days wisely.

Brad: [00:13:02] That’s a great point, Ben. That is a balance that all the athletes can think about. Here's what I think, or have found. There is one element in terms of making the best training decision. When you feel lousy, you don't push yourself. You back off. It is pretty simple. Any idiot who overrides that subjective feeling of not being sharp that day is going to go dig their own grave, right? But the other nuanced side that I had a lot of struggle with, I know I did in my own career, is sometimes you feel great but you should slow down, back off, take breaks because you are in a hyper aroused state from chronic production of cortisol. Sometimes you wake up on those mornings, you are not sore, you are pumped up because you have had all these competitive ambitions and you go out there and push yourself harder and harder when, if you had some of these high-tech signals, some scientific feedback, it would tell you, "Hey, man, you are burning fumes right now."

Ben: Absolutely. That is why you guys have talked about it before on Mark's Daily Apple. That is why I like measurements of the nervous system like heart rate variability and things like that. To find that you are actually running on fumes and perhaps the excitedness that you have about the day's training is just a bit of adrenergic stimulation and maybe some cortisol from being excited about the previous day's training, or about the race that you have coming up in a few weeks. Your nervous system is just about to be tanked. Doing something like a measurement is pretty useful because you can see downward trends. My logging in and doing a heart rate variability once a week doesn't do me much good versus seeing what it is doing, for instance, on Monday through Friday training routine. So absolutely. Self-quantification tools can come in handy in that type of situation.

Brad: [00:15:00] If you listeners have not read recent post on Mark's Daily Apple on heart rate variability or not read Ben's great commentary on Ben Greenfield's Fitness. Ben, give us the short version with the promise that I want to come back to do entire show with you on that subject because it is such a cool break through. Mark and I are really getting interested and we have just started measuring ourselves and plotting our course from being so far out of the loop for so long.

Ben: Do you mean how I use HRV or what?

Brad: Just a basic quick description for someone who is unfamiliar with that term.

Ben: Basically what it comes down to is your sympathetic fight or flight and your parasympathetic rest and digest branches of your nervous system actually stimulate your heart via your vagus nerve. The stimulation from both of those nervous system branches can be measured. The way that it is measured is measuring the amount of time that is spent between each beat of your heart. (Your heart rate variability) In ideal well-recovered scenario, you'd like a nice robust high-heart rate variability that shows a slight beat-to-beat fluctuation in terms of the amount of time between each beat of your heart. When that is fluctuating around, it means you have a well-tuned nervous system that is responding to micro changes in your environment, in your stressors, in your attitude, your thought patterns, and your conscious and subconscious emotions. When heart rate variability is just constant and low, what that means is that your nervous system is generally beat up.

You can dig into this even more. You can look at your sympathetic nervous system and you can see something called a low frequency number. This is one of the numbers you see measured when you analyze heart rate variability. A low frequency number can mean your sympathetic nervous system is over trained. And you have been doing too much intensity. Whereas a low high frequency number can mean that your parasympathetic system is over trained and you have been doing too much aerobic volume. You can even made educated training decisions on the day based on what branch of the nervous system appears to be more robust.

Often, in an athlete who is doing a combination of strength and endurance, which is quite common these days, you'll see that heart rate variability is just low and both branches are tanked and that is your yoga day or your easy swim day or your sauna day or whatever method of active recovery you like to do. It is really not that complex. What you will find is that is you are generally following a similar routine. Like, let's say you have a Monday through Friday split where Monday, Wednesday, and Friday you've got cardio intervals. Tuesday and Thursday you are doing strength training. Saturday you have got a decent bike ride or a run and Sunday you've got swim and a yoga session. You are going to find that as you go through the week you'll notice how your heart rate variability is responding in consistent patterns from week to week. You can make micro adjustments. You might find something like Wednesday is just not doing it for me. I think I should do two interval sessions a week, Monday and Friday, and maybe turn Wednesday into an easy short aerobic session or yoga or maybe even 45 minutes of mobility work or something that is less stressful then all of a sudden your heart rate variability tends to be consistently high from week to week. So once you start measuring, it becomes a matter of kind of playing with your training scenario to find the scenario that gives you the most rest with a final caveat being that you don't always want to be well recovered. Because the only way to get super fit is to super compensate. So sometimes you do want to dig yourself into that corner of low heart rate variability even if it is just for a few days so you bounce back. That is where it becomes a little bit of science. That is where two to four weeks out from the key event; you kind of do want to be beat up. So that when you rest, you super compensate. So it is not necessarily trying to achieve a consistent high heart rate variability year round, but it is having a high heart rate variability most of the time and then having those occasional periods of time where you do feel pretty beat up so you can bounce even harder.

Brad: [00:19:35] That's a good point. It might be overlooked in many cases. The process of fitness, especially if you harbor ambitious competitive goals, is once in a while, or even more often than that, you are going to slam yourself. Mark and I banter about this all the time about how rudimentary my own training methods were back in the day and how many times I became over trained and performed poorly. My numbers of victories on the pro circuit match the number of DNFs in races where I had to drop off because I was so fried even at the starting line. I speculate that it is very difficult to get to the top of the podium and that requires that you push it beyond the limits in training sometimes and that comes with a very high risk. If someone offered you a million dollars to finish the Hawaiian Ironman in less than fifteen hours with two weeks of training, you could probably do it. HEY! You just did do that, right? If it was trying to go faster for the million dollars, you'd be out there banging yourself and it would be a crash and burn effort because maybe you'd do it and maybe you wouldn't. You'd have to push yourself to the limit in training to even have a chance.

Ben: Absolutely. It was an interesting experience that I just had eight days ago racing Ironman on two weeks of training. That was one of those deals where I hadn't been training for Ironman. I had just been

doing Spartan racing and obs coursing and I got a call, out of the blue, from Team Timex who I race for offering me the Timex slot to the race and saying that it would be an interesting story to find out whether or not the human can do an Ironman, or how fast the human body could do an Ironman without actually training for one and how it would feel. That was my most recent experience and I definitely erred toward the side of getting my heart rate variability as high as humanly possible prior to that race. When I got the call from Timex, I had just finished racing the Spartan World Championships and so I was already pretty beat up. I basically spent fourteen days doing very very little training at all. I was tempted to do panic training and go out start pounding the pavement and hop on the old bike and begin riding and getting in swim sessions. That was my initial plan to go hard-core triathlon training for two weeks.

Brad: I like that term, that's a new one. We can trademark that. "Welcome to Ben Greenfield's Panic Training Podcast."

Ben: Yea. Exactly. The problem was I was paying attention to my heart rate variability. I knew I would arrive in Hawaii sick and beat up because my heart rate variability was already low. I had no business going into intense triathlon training protocol for two weeks, so I ditched that plan and I, instead, did yoga, massage, sauna, a lot of time with Lacrosse balls and massage sticks during the time I would be normally exercising. I just did mobility work. I did some very very easy swimming like hypoxic sets back and forth underneath the water, kind swimming very relaxed without thrashing at all. Basically I kind of moved and did self-mobility work. I did a couple of acupuncture sessions. I did several massages, like I mentioned. I just did a bunch of TLC for two weeks and tried to get my body going into Ironman almost like more undertrained than over trained. I wound up having a kind of easy day. I got to the 20 mark of the marathon after the swim and the bike ride and I had a ton of gas left in the tank. I felt great crossing the finish line and I think part of that was because I did pay attention to self quantification variables that we just got through talking about. I kind of opted toward the route of over-recovering rather than panic training.

Brad: [00:24:01] Obviously, great advice for every single person on the starting line should have shattered you for the final two weeks because those are when mistakes are made and no gains are made. Only mistakes can be made when you do that panic training in the end. Your approach echoes the primal theme that our bodies are capable of magnificent feats when we take good care of it we need to sleep enough, when we have good nutrition and, obviously, you have a background of endurance where you can tap into your genetic potential to complete the event without optimal preparation. I think it is probably not as well respected, as it should be. We have the ability as humans to come out and deliver peak performance without necessarily having day after day after day after day to clock in and do a workout lest we get out of shape.

Ben: Tim Noakes talks about this in his book, "*Waterlogged*." Daniel Lieberman in his book, "*Evolution of the Human Body,*" and there is a little bit in the book, "*Born to Run*." There are a few other authors and articles that have delved into this whole idea that the human body has a pretty high amount of mitochondrial density compared to other mammals. We have a high amount of twitch muscles. We have some really nice hip extensors that allow for efficient gait patterns. We have got the ability to cool ourselves. We have the intelligence and opposable thumbs to be able to fuel better than any animals during exercise. We you put a lot of these variables together, the human body uninjured and well taken care of can go for long periods of time without necessarily having trained as much as we have been led to believe that we need to train in order to go for that period of time.

That is always, not just for this minimalist Ironman thing, but also always, at least for the last few years when I realized the science of this. This has been my method of training: low level movement throughout the day. I am standing at my treadmill workstation right now and the reason I am not walking because it makes a little bit of squeak. I don't walk during my actual podcast recordings just because we don't want to give the audio engineer a fit. I practice low-level physical activity during the day, lifting heavy stuff once in a while, sprinting, and then doing the smallest possible amount of training primarily comprised of high-intensity interval training. It has always allowed me to get away with low amounts of training. Like last year I did Ironman Canada and had one of the fastest age group times in Ironman Canada and that was on eight to ten hours of training per week. I was using that approach. I don't count the time I spend walking or standing at my treadmill desk. I don't count the time I spend cranking out a few pull-ups every time I walk

underneath my office door. It is just life. Then I stack a little bit of training intelligently at the beginning or the end of the day on top of that. I think a lot more people than we think could go out, if they did live their lives in this healthy way, the primal way, could go out and do some of these grueling feats without necessarily going out to do a two-hour, three-hour death march on the pavement every weekend to be ready for their marathon.

Brad: We know how the highly motivated, goal-driven fitness enthusiast thinks. They are listening to the podcast and nodding their heads in agreement. My observation is, in real life, people listen and they absorb it and they intuit it and then sometimes the fire, the flame, burns so brightly they sort of ignore these notions and behave in a manner than tends toward obsessive-compulsive, or insecure, thinking in the back of their mind that taking a day off is good sensible thing to do but they are afraid to do it lest they get out of shape or put on a pound or whatever these irrational notions are. So I think everyone can sit back and reference examples like Ben's where maybe you had a cold for a couple of weeks, you were off exercise and then you came back and in your first swim workout, you were hitting the best times in the fast lanes because you were rested or as a component of that or set a PR off an easy winter training or any sort of such epiphanies where you respect the importance of rest.

Ben: [00:29:07] Exactly. The other really important thing that I want to emphasize is rest doesn't mean that you can't put work into your body to feel good about what you have accomplished at the end of the day in terms of making your body better. Meaning that on a rest day, a lot of times I'll go sit in the sauna and read some magazines and get a little affirmation, and maybe do a little cold thermogenesis by going for a dip in the river. I might do some foam rolling or some mobility or some yoga while I am watching Shark Tank on Hulu. It is not like by the end of a recovery day where I feel like a fat slob. I do put work into my body. I do get better even on those easy days. I think a lot of people listening tap into the reality of easy day or recovery day, not necessarily meaning you go out and aerobic run, or an aerobic bike ride, or an aerobic swim or easier weight training than you normally do. There are other things out there, like yoga, mobility, cold thermogenesis, saunas, inversion, all sorts of things you can do and feel good about yourself to tap into that need to move without actually straining your nervous system or your muscular-skeletal system.

Brad: Well, the elite athletes all do it. They all spend so much time as athletes doing all the bells and whistles and the **accouterments** and the average Joe who is busy and has a hectic lifestyle anyway is squeezing in workouts on the go thereby compromising and possibly creating a more stressful experience. It is because they rushed over to the gym, banged out a workout, and rushed back to the office rather than of taking to chill out or take the time to stretch out at the end.

Ben: I completely agree.

Brad: [00:31:04] Speaking of foam rolling, on one of your podcasts you mentioned that you when you do full rolling or ball rolling on your abdomen, you can stimulate the parasympathetic nervous system.

Ben: You can. It is not something that I have talked about too much before. It is something that Kelly Starrett recently talked about in his book, "*Ready to Run*." He uses something like a soccer ball method that mobility works the lower gut and lower abdomen but you can certainly get a pretty cool parasympathetic system and gut effect by doing some foam rolling on the abdomen and gut area. I really like that also for folks who tend to get constipated like a left to right mobility type of movement in the lower abs. It can help quite a bit with that, too. I am a huge fan of mobility work not just for recovery but also for pooping and stuff like that.

Brad: How does it help your sore muscles after your workout to get some rolling in?

Ben: It does everything from freeing up areas of knotted tissue and facial adhesions and improving blood flow to increasing the release of pain-killing endorphins. The benefits are multiple when it come3s to that type of stuff. I do mobility work every day. Underneath the couch in the living room, I have the cross balls, foam roller, massage sticks, you name it and in the morning a lot of the time I will be visiting with my kids before they are off to school and do mobility work while they are eating breakfast. They are used to seeing

Dad grimace and squirm as I roll around on the living room floor as I hump a foam roller. They eat breakfast and I am their entertainment.

Brad: Sometimes it is a little painful but it is a benefit to the nervous system by really grinding in there, huh?

Ben: Oh, yeah. Absolutely. Even if it hurts a little bit, foam rolling can be like a deep tissue release type of hurt that is a good hurt.

Brad: [00:33:05] Ben, on this first show on our show, I want to give listeners a general sense of what you are all about and definitely get you back in to get really deep on the burgeoning subject of heart rate variability. But now as we are trying to wrap it up here, I want to talk about your masterpiece, "*Beyond Training*" that is 479 pages or something. There is basically a solution in there for all kinds of problems, issues, maladies or pursuing and breaking through to higher goals. There is one stumbling block that I have noticed in people that I know in my peer group who are all getting up to the Big 50 right now. These are my friends who were, of course, all exceptional athletes back in the day and still think that we are pretty hot stuff, but there is a time crunch and there is even a motivation crunch where we are not living and dying by athlete performance any more. How does someone get into the proper mindset and also get the best bang for their buck if they are trying to stay fit and healthy and avoid chronic pain and keep in shape and delay the aging process?

Ben: I think, for the most part, Mark has kind of nailed it with his lift heavy stuff and sprint every once in a while and move every day type of scenario, as far as a sustainable workout routine is concerned. And especially if you are training for something more intensive by putting high-intensity cardio interval session in a couple of times a week and something semi long on a weekend like a 60-minute trail run, or something like that that is not quite near the level of the more voluminous work that you would see in traditional endurance but still you inject some additional endurance in the body. As far as sustainability, that is a sustainable program. It is all the little things that add up quickly though. Every single morning I get out of bed. I take a cold shower to prime my nervous system. I do my mobility work. I do about 10 to 15 minutes of yoga and that is just how I start every single day. If you look at my life by the end of the week, I have already amassed 70 to 80 minutes of yoga and almost a half hour of standing in cold water and another hour of mobility work. All of this stuff adds up. It is the little tiny things that you do every day like those small habits and consistent habits that keep you in the game for a long time. Also building your fitness a little bit more easily than like a structured hectic training session.

Brad: Everyone's got a few minutes to hit the cold shower or do a simple breathing and stretching ritual outdoors for a couple of minutes to start the day and prime that nervous system. What exactly do you mean by that?

Ben: By what?

Brad: By priming the nervous system in a cold shower and the yoga.

Ben: Doing something slightly hard every day, even something as simple as a cold shower, allows you to tap into the power of in hormesis, which is that slight stressors actually make your nervous system stronger and more robust and more readily able to handle stress. That is the idea behind cold showers, behind heat exposure, behind training in insane amounts. (That didn't sound quite right when I say "insane amounts," when I meant in space sane amounts.) Basically it is just a matter of hormesis. Then the other part of this in terms of the yoga is simply moving, getting the blood flowing and activating breathing patterns and rest patterns and kind of distressing patterns that stick with you the rest of the day. I find that that helps me a ton versus just launching into emails or articles or blog posts or things of that nature. I just take that time to recover and relax first. That is the hard thing for me. The hard thing for me is not doing the hard workout. I actually save that for later in the day. The hard thing for me is doing the rest, recovery, the mobility, the yoga, and that type of thing.

Brad: It pays off and it is within access to everyone. If you think of the guy or gal with less time at the gym or on the roads, if you imagine this pie and through in some hormesis type efforts that are very short in duration but can be a wonderful complement to the week. It is one of my favorite things about your angle and your whole essence here is that you emphasize all those things rather than just the macro, just the big stuff on the plate of health and fitness.

Ben: Exactly.

Brad: So, Ben. I really appreciate your joining us. I want the listeners to go over to Ben Greenfield Fitness and check out that podcast, subscribe, "*Beyond Training*" is the name of his book available in all the stores or on the website beyondtraining.com. This is your host, Brad Kearns for our guest, Ben Greenfield. Thanks so much for listening to the Primal Blueprint podcast.