

The Human Upgrade: Episode 1127

[00:00:00] **Dave:** You are listening to The Human Upgrade with Dave Asprey. Today is a really fun episode as opposed to all the other ones, which are generally-- oh wait, they're all fun, but they're just different topics, whatever's top of mind. You know you're going to hear something likely about being smarter, living to at least 180.

[00:00:21] If someone says health span on the show, I'm going to thumb my nose at them and call them a wuss because the people who are trying to cut the knees off of the longevity movement by saying, oh, we're just going to be healthier and die when we were supposed to die, screw you guys. Just screw you. Because we are at the point where we can, for the first time in recent history, extend our lifespan, and we have a moral imperative to do this because, it's going to sound weird, but we don't have enough kids.

[00:00:51] In all European countries, some Asian countries, and certainly in North America, our replacement rate is far below. So we're going to have empty cities or we're going to have old people with the energy of young people and the wisdom of old people who are going to be productive members of society for twice as long.

[00:01:07] We better do it. And you're going to be a part of it because you'll listen to the show. So you can just count on hearing that kind of stuff. And today's episode is no different. This is with a guy I've been watching and admiring and sometimes triggered by just because he does these odd movements that no human should be capable of yet he is, and someone I actually worked really hard in connecting with last time I was in Florida in his home country. Actually, this was several last times ago. But between having my teenagers when I'm traveling, they get my time and attention first, and he's got toddlers. We never did it. It's none other than Ben Patrick who is by far my favorite podcaster with the last name Patrick.

[00:01:51] And who is Ben Patrick? You might know him as Knee Over Toes guy if you follow functional movement. In the world of longevity, in the world of biohacking, since my very first book in the very first conference 10 years ago-- by the way, new conference is End of May in Dallas. Go to biohacking.conference.com. The first, the biggest, and by far, the coolest biohacking conference ever. You should show up.

[00:02:18] Well, what's been a pillar of this is functional movement. And functional movement means that whatever age you are, whether you're 18 and you want to be able to do parkour, or

The Human Upgrade: Episode 1127

you're 30 and you still want to do parkour despite all the injuries you got doing something that's probably not good for you, or whether you're 80 and you still want to do it and maybe still can do it, functional movement defines how long you're going to live and certainly how well you're going to live if you're one of those weak health span people.

[00:02:45] I'm going to convert you by the end of the show. I'm going to be as mean to health span people in a loving, kind, meanness as I am to vegans. Because, guys, we're on the same team. You're just doing it wrong. But functional movement, back to that, if you can't walk, you can't move, and you don't have full flexibility, your brain doesn't work right. Ben Patrick, the reason I say he triggers me is I've had three knee surgeries by the time I was 23.

[00:03:13] And Ben, I, for years, had PTSD because I would walk and my right leg would fold. My kneecap would shoot forward. My leg would fold sideways, the way knees shouldn't. I would fall over. This is in college. And there's a thing. You always fall over in front of attractive women when you're 19, or 20, or 21.

[00:03:31] I don't know why that is. So Ben, our first question as the guy who can like stand on one leg upside down, why do you always fall over in front of attractive women or at least more often?

[00:03:41] **Ben:** I wasn't in front of attractive women because I was having those knee surgeries as well and dropped out of school.

[00:03:46] **Dave:** Oh, there you go.

[00:03:47] **Ben:** You're a step ahead of me.

[00:03:49] **Dave:** Yeah. At least you dropped out. They just kicked me out. It's the same thing. I'm kidding. But we both had crazy knee problems, and I've trekked the Himalayas since. I've had all kinds of yoga and other functional movement stuff. But you do things that literally I see it and it makes me hurt inside because my body tells me, holy shit. Humans can't do that.

[00:04:11] Yet you've trained people how to do this, and I want to do your stuff. And until I repaired the joint to my big toe, that was an old yoga injury, I don't think I could have. But I think I'm to the point where my movement is there. So I want to go deep with you on how you learned this crazy stuff, why you're called Knees Over Toes guy.

The Human Upgrade: Episode 1127

[00:04:29] Let's start with that, knees over toes. That's actually a thing in weightlifting. You never do that. And yet you call yourself that. What's up with that?

[00:04:38] **Ben:** Let's do this. And I don't know if you know, but I was actually selling your products out of my gym 10 years ago.

[00:04:44] **Dave:** Holy crap. I never knew that, Ben.

[00:04:46] **Ben:** I've sold tens of thousands of dollars, and we all loved it and had great results dating back 10 years ago.

[00:04:53] **Dave:** Ben, you're amazing, man. Thank you for supporting me back then. We've been communicating all this time and you never told me. I love that.

[00:04:58] **Ben:** Yeah, yeah. That was social media. And I had no intention, even then 10 years ago, I never expected to have the abilities that I do now. Really, I just wanted to be off painkillers for my knees. I wanted to just be able to enjoy playing some pickup basketball on the weekend and not having to worry, am I going to have a knee surgery if I go play pickup basketball with my friends?

[00:05:20] So the fundamental of that for me was walking backward. And I would either have a friend or my now wife sit in the car with it in neutral, and I'd put my butt against the bumper, and I'd push it backward. Or I'd find a sled at the gym and drag it backward. But walking backward for me is what got me off painkillers for my knees.

[00:05:42] And if you look at it from a side angle, if you stood up right now and took a step backward, your knee is over your toes. It was found in the 1970s. Yeah. Go ahead and stand up. Take your time

[00:05:52] **Dave:** I'm standing up.

[00:05:53] **Ben:** Side sideways to the camera.

[00:05:56] **Dave:** My camera can do this.

[00:05:57] **Ben:** Yeah. Now take a step backward. Take a step backward with your right leg. There you go.

[00:06:06] **Dave:** Yeah, my knees are over my toes.

The Human Upgrade: Episode 1127

[00:06:07] **Ben:** Yeah, you wouldn't be able to walk backward. Walking forward is knees behind toes. Walking backward is knees over toes. Yeah, it was found at a university in the 1970s that when your knee is over your toe, there's more pressure on the knee. This wasn't some long-term study that found that was bad. They just found there is pressure on your knee when it's over your toe.

[00:06:32] So for me, it was finding what I could do to improve at that pressure that then got me off painkillers, got me back able to play basketball, so I became really-- I've always been a bit obsessive. So I've probably now spent more time coaching and digging into these ingredients of knees over toes training.

[00:06:51] And trust me, I never imagined I would be able to do the things I'm doing now. I can jump off stuff and do all kinds of basketball dunks and explode from crazy positions with my knees. That's not what I was going for. It's definitely helped to show and inspire people that the body is not as fragile as most people think. But if you avoid pressure on the body, you might not get there. The whole idea is how can you find a scalable route to be able to handle pressure?

[00:07:22] **Dave:** It seems like the basics of everything in the biohacking world is, how do I get a signal into the body that's the right signal, at the right intensity, at the right time, for the right time to cause change without overwhelming it? How did you figure out that walking backwards was that signal?

[00:07:43] **Ben:** Well, it's definitely not something new. Some people listening to this may have even recalled seeing older folks holding hands, walking backward in the park, because it's a very safe way to start, is you have a partner hold your hand. They're walking forward, making sure that you're walking on a safe path. And this was passed down generation to generation in China

[00:08:02] **Dave:** I thought that was Alzheimer's this whole time. Oh man.

[00:08:09] **Ben:** So that would be a low level of it that's been passed down for centuries to prevent arthritis in the knee. There was someone I think you would consider in the biohacking space. He at least had this viewpoint. Charles Poliquin, he trained Olympic athletes.

[00:08:24] **Dave:** Yeah, Charles is an OG biohacker. I dedicated one of my books to him when he passed.

The Human Upgrade: Episode 1127

[00:08:28] **Ben:** No way.

[00:08:29] **Dave:** Hundreds of Olympic athletes. So he was backwards walker.

[00:08:31] **Ben:** That's right. That's right. So back when I was far from an Olympic athlete, a failed high school athlete with bum knee, nasty surgery stuff, hooked on painkillers, I saw this clue from him that the farther and stronger the knee can go over the toe, the less chance the knee has of then getting hurt in the sport.

[00:08:53] And so he was having people drag sleds. He learned that from Louis Simmons, who's actually a powerlifting coach. And he got that from Finnish powerlifters whose day jobs were dragging trees backward. They would've to drag trees. And then they credited getting these incredible legs from dragging trees.

[00:09:13] **Dave:** Wow. Okay. You're convincing me that there's a history here that I did not know about. I've seen yourself online about walking backwards, and I admit I haven't done very much of it. I'm about to get a system that I'm testing out that would allow me to put some extra tension while I walk backwards. How many miles a day of walking backwards do you have to do?

[00:09:36] **Ben:** I don't do miles a day. I've done--

[00:09:38] **Dave:** [Inaudible].

[00:09:39] **Ben:** Yeah. I look back, and I've tracked all my logs. We're talking about 13 years that I've been doing it, and only we're talking roughly a quarter mile, three times a week for that time. And in seeking to add resistance, I'll send you one of our backward treadmills. Only after years and years of the number one question being how do I add resistance without a sled, without good weather? We make a cheap treadmill that doesn't turn on, but it has resistance, and it's only for backward. It's a backward--

[00:10:08] **Dave:** How much does it cost?

[00:10:10] **Ben:** 600 if you're paying full price with no discounts, nothing. I'll send you one of those.

The Human Upgrade: Episode 1127

[00:10:15] **Dave:** Okay, so it's within reach for a lot of people. Or you can go outside for free and do it. And that's something that's really important. There's more people than we've had in the last 20 or 30 years who are now paycheck to paycheck. And it couldn't have anything to do with the fact that our government just created 40% more of our currency last year, which means they sold 40% of your bank account, and then gave it away, not to you. So I'm a little annoyed about that. I don't know about you, but you live in Florida.

[00:10:47] **Ben:** My legal team just asked me to end the podcast. It's been great.

[00:10:50] **Dave:** Yeah, exactly. Exactly. But that stuff's going on. So I just want to say \$600 is still a lot of money, but it's--

[00:10:58] **Ben:** Oh, for sure.

[00:10:58] **Dave:** Achievable. And there is a way to do this, is with a weighted vest or carrying something, or does it need to be pulling something when you walk backwards?

[00:11:07] **Ben:** That's a great question. I think the foundation of exercise for longevity is resistance from the ground. Now, that could mean what I started doing originally, dragging a sled. So if you dragged a sled, where is the resistance on your body? It's the friction on the ground. It's not bearing down on you.

[00:11:28] I recently showed this, and a lot of people are like, oh, I get it. I hooked my mom who's 69 up to a 1,000-pounds sled. She tried with all her might. Did she get hurt? No, not at all. It's fundamentally safe when the resistance comes from the ground. Now, the cheapest form of that would be a hill.

[00:11:46] The difference with the hill is you still have to come back down. So actually, a lot of people get great results walking backward up a hill. Just make sure you come down really safely and slowly.

[00:11:54] **Dave:** [Inaudible].

[00:11:58] **Ben:** Yeah. My treadmill for \$600 is not free, but the average one costs over \$3,000 at the gym.

The Human Upgrade: Episode 1127

[00:12:06] **Dave:** Affordable. It's affordable is what I'm saying, though, is people are going to have \$600, so there's still a lot to learn in this episode. And \$600 is, for a piece of fitness equipment, not exorbitant by a long shot. It's in the affordable class. I'm with you.

[00:12:19] **Ben:** Right. And at gyms, the treadmills that are already there, even though I would argue it's better to have ones that don't have the electricity that you do the work for cheaper. Nonetheless, the million treadmills that are already out there, most of them, if you don't turn it on and you turn around and put your butt against the handle and spin it backward, there's some internal resistance.

[00:12:40] Tens of thousands of people had great results actually by backward dead milling, meaning not turning the treadmill on. You use your strength to spin the belt and going backward. I like about five minutes if you have resistance. 10 minutes if you don't. Look, if you've got good weather, you could drag a tire. Some people have results in driveways, dragging tires for that friction.

[00:13:04] **Dave:** Wow. Okay.

[00:13:05] **Ben:** So there's a lot of ways to do it.

[00:13:06] **Dave:** So it's a friction thing, not a weight thing.

[00:13:09] **Ben:** Yeah. The resistance is coming from the ground upward rather than weighing down on you, which weightlifting has its own awesome benefits. I just think the foundation of human exercise, or let's say resistance training, would be where the resistance comes from the ground.

[00:13:24] Because it's so fundamentally safe, you can ramp up-- when you go backward with resistance, five minutes, you're getting cardio. Your feet are getting stronger. I help people fix plantar fasciitis by stepping backward. That's a toe first activity. Walking forward heel first. So there's a lot you can get from resisting from the ground.

[00:13:44] **Dave:** When you look at shaolin monks, these guys aren't muscular at all, but they can do stuff that a lot of powerlifters can't do. And especially on a power per pound of body weight, they're crazy. And I've learned mostly from studying esoteric forms of Chinese medicine

The Human Upgrade: Episode 1127

and movement arts-- I'm a nerd that way. I think you're too. You can strengthen your muscles, which is the American way. You've got guns or whatever.

[00:14:15] But then you can strengthen tendons and ligaments. And then in the East, they talk about strengthening Wong, which is interstitial areas of the body, which is how the shaolin guys can do this with no muscle that you can see, and they're standing on one finger and doing all that stuff. What are you training? Are you strengthening tendon and ligaments? Are you training muscle, or are you strengthening bone, or are you strengthening interstitial tissues?

[00:14:41] **Ben:** The interstitial goes beyond what I understand.

[00:14:44] **Dave:** Okay.

[00:14:45] **Ben:** I don't even know what that word means, but I think I get the concept. But I think you're strengthening everything when you're not avoiding positions but embracing them. So let's say, okay, when the knee is over toe, there's more pressure on the knee. If I hadn't developed some tendon ligament, there's no way I'd be able to do all this stuff year after year without ever having a breakdown or getting hurt.

[00:15:10] There's no way. It's just muscles. And I don't like to go down the study rabbit hole. My challenge for myself is almost, can I explain this with common sense? And so, yeah, when you get into some of these tougher positions, you're loading more than just muscle. You're actually loading joints.

[00:15:25] And there's a big misunderstanding for most, not all people. You clearly already understand this. Most people don't realize that joints have certain connective tissues that can develop and build. It's not only muscle. I grew up thinking, okay, muscle can build, but everything else is just going to degrade. And you hope that you live long enough and it doesn't degrade too. It's all just downhill. I genuinely thought joints are downhill, but muscles, you can grow. If you avoid them--

[00:15:53] **Dave:** The teeth too. They don't grow either except they do. Every tissue in the body can, as far as I can tell.

[00:15:58] **Ben:** Yeah. Now, some people have brought up, maybe there's certain connective tissues that can't grow.

The Human Upgrade: Episode 1127

[00:16:03] **Dave:** Like what?

[00:16:03] **Ben:** We know that tendons and ligaments can grow. Cartilage hasn't been explored as much.

[00:16:11] **Dave:** It does, absolutely, in some circumstances, grow. We know stem cells can, but for me, the most profound thing I've ever seen in the space that you'll probably love-- this was when I was running a longevity anti-aging group near Stanford in Palo Alto, when I was in my late 20s, because I was learning all this stuff about how to fix my body from people three times my age.

[00:16:36] This woman came in. She was probably 50. She was morbidly obese and on a walker, and she came in and just could barely move, and her knees were in terrible pain. She had two injections of ozone into the joint space in her knees, basically where the cartilage is, and she showed us her x-rays when she came in the first time, and she came back six weeks later, and she showed us her new x-rays.

[00:17:00] And you could see she had grown in a relatively short period of time, thicker cartilage. And I'm like, oh, it can be done. Now, whether she was a freak case, what other variables? I don't know. But I believe we can even grow that even though a lot of people think we can't. And I would bet if we measured yours, whether new cells grew or maybe they hydrated, maybe you have more glucosamine on them, I think everything is there. If you get a signal and you just came up this crazy backwards signal that I'll bet you money, fix this cartilage too--

[00:17:37] **Ben:** Yeah. And I think it's possible. And we already know that. We already know that plenty can grow to make a significant change. So these principles are just, don't work through pain. Find these positions where you can be addressing your joints, and then fully train the joints. So the goal is actually to progress from backward walking to full range of motion knee strengthening.

[00:18:01] **Dave:** What does that look like? So you do your quarter mile, three times a week of walking backwards with some weight, and then how would you strengthen the knee after that?

The Human Upgrade: Episode 1127

[00:18:12] **Ben:** And to be clear, I think the backward walking is a great starting process in itself without adding weight to it. Just so someone out there is thinking-- a lot of people get results just with the backward walking. To this day, my Zero program where you need nothing, no equipment whatsoever, to this day, that's the most appreciated program.

[00:18:32] I sell equipment, but Zero is the most appreciated. Progressing then strengthening calf muscles, strengthening tibialis muscles. Tibialis anterior is the muscle on your shin, so it goes from under your knee, wraps around to the inside of the foot. We want to strengthen all these things. It's a ground-up approach. We're rebuilding the body from the ground up. The backward walking, you're pushing through the toes.

[00:18:56] **Dave:** That's the muscle that's right here on the--

[00:19:00] **Ben:** Is that your right leg?

[00:19:01] **Dave:** Left leg.

[00:19:02] **Ben:** I guess maybe our screen is inverted. Yeah, yeah, exactly. It actually starts from the inside of the foot and then wraps across.

[00:19:12] **Dave:** It comes across the top or it comes across--

[00:19:16] **Ben:** Yeah, it comes across the top.

[00:19:18] **Dave:** So then--

[00:19:18] **Ben:** Your shin muscle.

[00:19:19] **Dave:** Is it the shin muscle on the outside of the shin or on the inside of the shin?

[00:19:23] **Ben:** Yes.

[00:19:24] **Dave:** On the outside.

[00:19:25] **Ben:** Yeah.

[00:19:25] **Dave:** Goes under, goes on the outside. All right.

[00:19:29] **Ben:** Yeah. I think on the screen, our right, left is inverted. But fortunately, I've made bazillions of videos on these. So if you search like anterior tibialis raised, you'll see lots of stuff.

The Human Upgrade: Episode 1127

[00:19:41] **Dave:** I've been doing a lot of PT on that because I had a fused joint on my right foot from an old yoga injury that was really inhibiting my movement. It was driving me crazy. So I did a document around how I healed from the surgery faster. But I had to do a lot of PT, and I'm still doing foot strengthening.

[00:19:58] So I know that's, for me, an area of improvement. And you are one of the few people out there who's really talking about all the crazy stuff going on in feet. And it feels like maybe so many people are having knee problems because they're wearing shoes that scrunch their toes, and they're walking poorly. I think that's what got me early on, because I have giant feet, size 16 feet that are wide in the front. So it's no wonder that when I'm 16 years old with giant feet that I probably didn't have great shoes.

[00:20:28] **Ben:** Good point. All right, let's do this fully. This is even more exciting. There's no doubt that if we started from your big toe and gradually went up the chain to the knee, and then even if we continued beyond to the hip, it's all related. It's not like there's just one secret thing. But when we start there, 3 million cases of bunions are created per year in the US alone.

[00:20:48] So most shoes are not shaped like feet. I didn't grow up realizing this. I've only realized this in recent years, looking down at my own big toes jammed in. So most shoes were designed for style. They're pointed, and that shuts off your big toe. You have different foot muscles shut off. So what I do is I have people walk backward.

[00:21:07] If they're having foot issues, I advise them to wear a shoe that's shaped like a foot and to put a big toe spacer in, at least in the meantime. For people who have foot problems, putting a big toe spacer in, in a foot shaped shoe, walking backward, it's like your foot muscles come alive because now their functioning as they were designed to, because, remember, the backward walking is a toe first activity.

[00:21:31] So I'm not saying this is an end all be all. You could add anything you want to that, but I think those three basics have to be common knowledge for someone with foot problems, is that backward is a toe first activity to get strength and circulation. Your shoe might not even be allowing your big toes to function.

[00:21:47] And if that's already been chronically deformed, like it is for millions of people, you might need a big toe spacer to get started. And then, man, things come alive. So, yes, I've gone so

The Human Upgrade: Episode 1127

far down this that I have the only basketball shoe that's shaped like a foot. I make my own basketball shoe after years and years of complaining that basketball shoes aren't shaped like feet.

[00:22:06] Now, as we continue up the chain, we want strong lower leg muscles on each side. So you go to your gym. You got a seated calf machine there. Wonderful. Where's the seated tip machine next to it? There's not. But bicep, tricep, we got both sides. But now for the lower leg, we're just going to ignore one side of the leg.

[00:22:21] This is just the way it built up. Those front shin muscles are not exactly like bodybuilding show off muscles. So at the gym, it's hard to train that. Fortunately, you can use a wall. You can do a body weight tibialis raise. We work people from 10 to 25 reps. 25 reps, body weight, go try it right now while you're listening to this.

[00:22:43] You have no excuse not to try 25 tibialis raises against the wall. I leave up my tutorial on that on YouTube for free. Zero tibialis raise, meaning you need no equipment. Tibialis raise. 25 reps at your level, you're going to be on fire. And that's after you already did your 10 minutes of backward walking.

[00:23:00] 10 minutes backward walking. Now build up to 25 tibialis raises. Now we also do a calf raise. We want to be strong on both sides. Then we actually start to get into the knee itself bending. A stairwell is a perfect place to start, and it allows you to elevate your front foot and actually to bend your front knee through a full range of motion.

[00:23:17] You can use the railings to hold on. So I call this an ATG split squat. A split squat is like a lunge, but stationary. This is typically done with the knee bending about halfway. I do it full range of motion on a split squat. So I don't do a half split squat. I do a full range of motion split squat. ATG is short for ass to grass, I made my business athletic truth group just so that it would--

[00:23:43] **Dave:** Ass to Grass Athletic Truth Group. I love it. That actually makes me happy. Thanks for telling me the truth, Ben. Because my seventh grade sense of humor has now been activated, and I just actually, I'm now two years younger biologically.

[00:23:58] **Ben:** And with that, just to finish people out who want to try a protocol, I advise people to do five sets of five reps per side. So it's like you're taking a full range of motion for the

The Human Upgrade: Episode 1127

knee, but you're scaling it down to a super low amount of pressure and a low amount of flexibility needed.

[00:24:16] But as you lower your front foot, as you reduce the need of assistance, you now progress to actually that quite amazing mobility. So that's what I did for my mom. She was struggling to get out of bed at 65 years old. Different. Probably on the fast track for hip replacement. Now she's 69. She can sprint and can do flat ground on these ATG split squats.

[00:24:37] So for longevity, I want people to be able to do a flat ground ATG split squat and maintain that for life. I even add weights to it, so I'm like, my body's become like an acrobat because my leg muscles, I can do a front splits and fly up and dunk a basketball because I'm training my strength and flexibilities.

[00:24:53] It's the same thing. I don't think of them as different qualities. I train my strength through my flexibility. One and the same. So I told you earlier, I think the foundation of exercise is resistance from the ground. I think the second part of exercise to me is strength and flexibility as one. And then for me, the only third part is filling in weak links, like I mentioned, the tibialis raise. That's it. Done. End of podcast. If all you did was just learn those three things, that's the best I can give you. Those are the three things.

[00:25:20] **Dave:** ATG split squat, tibialis raise, and--

[00:25:22] **Ben:** And walking backward. That would be your sampler plate.

[00:25:27] **Dave:** All right. There you go, guys. Now you can add another 10 years to your health span if that's your minimalistic goal of failure, or you could live another 50 years and be fully mobile by doing the same exercises. I think you should choose the latter, but hey, it's just me. You be you.

[00:25:47] So Ben, this is really masterclass-level stuff. And you mentioned everything starts with the feet. And it's reminding me of, again, some of the ancient esoteric stuff. And by the way, what you're doing sounds a lot like what the shaolin people are doing, the split squat to dunk. So I think you're training certainly ligaments and tendons because they're a part of strength.

[00:26:10] Actually reminds me of two things. The esoteric thing is there's something called a homunculus, which is also known as the tactile homunculus. And this is if you were to draw

The Human Upgrade: Episode 1127

yourself or draw a human based on where we feel the most, they have very ancient statues that they found, and they have giant lips because our lips have a lot of sensory things on them, giant tongue, if you can see the tongue in the statue, giant eyes, giant ears, huge hands because we have so much density, and huge feet, and of course huge genitals. Because that's where we actually interact with the world the most, through those systems.

[00:26:52] So the reason the feet are really big is because there's so many nerves there. And when the feet are working properly, you end up having a brain that works better because you're literally processing more reality when you can feel the ground and when you activate all the muscles. I was actually duck-footed as a kid, pretty profoundly.

[00:27:12] And I have a flat feet. They're much less flat than they were because of all the rehab work I've done. I can control my toes individually, and I've done all kinds of weird work on just realizing I had a muscle in my foot that I never learned to use when I was a kid. And some of that may be related to Asperger's syndrome or just reading books when I was 18 months old instead of crawling, which I know is probably not good for my nervous system, but hey, you can teach a baby to read.

[00:27:37] There's a book about it. My parents read it. So there's always an upside and a downside. So with all these functional movement problems, I've gone down all these different paths, and I don't have all day to fix my feet and fix my knees and do this and do that. So I want to amplify this using some of the technology from Smarter Not Harder or from Upgrade Labs. What would happen if you put a blood flow restriction on your legs when you did this? You ever try that? I talk about the bands in the book.

[00:28:05] **Ben:** No clue.

[00:28:06] **Dave:** Doesn't work?

[00:28:07] **Ben:** No clue.

[00:28:08] **Dave:** No clue. All right.

[00:28:08] **Ben:** No, no. I'm saying I have-- I think with your knowledge, you could expand upon these things a lot, from nutritional perspectives to then enhance the desired outcomes and so on,

The Human Upgrade: Episode 1127

like what you're saying. But I figured out early on that the best thing I could contribute would be like, what can I get out of the most basic things I can do here?

[00:28:36] For example, I don't do any treatments for my body whatsoever. Don't take any supplements whatsoever, because I want to know what am I getting exactly from these exercises? So what you see with me is what you get. That's all I do. There's nothing else that could be enhancing my results.

[00:28:52] That doesn't mean I don't think there's things that could enhance results further, but, my God, to be dunking a basketball and doing a splits and stuff, I never dreamed of doing this stuff. So when people are like, why don't you add this or that treatment to it, I'm like, well, I'm not that creative of a person.

[00:29:07] So I just stay in my zone. I think your knowledge, you could probably look at each thing and nutritionally and otherwise know how to help people get even better results from it, recover from-- so I think that's the beauty of it, is maybe I'm bios slacking, but you're biohacking, and there's--

[00:29:25] **Dave:** I'm confused though, because you don't measure all those unnatural toxins you take in every day, right?

[00:29:32] **Ben:** I don't measure them.

[00:29:33] **Dave:** But you're taking them, so wouldn't it make sense to at least take supplements to balance those out since you can't prove that they didn't [Inaudible] benefits. I'm starting to sense like a--

[00:29:42] **Ben:** I'm definitely on your side.

[00:29:43] **Dave:** An earthquake of logic slowly tumbling in, and tomorrow you're going to be taking handfuls of pills. I'm seeing it.

[00:29:50] **Ben:** Well, I think that could be cool, is you could share what you think. But you could share what you think the most basic things are in that regard. I can tell you where I'm at right now. We try to get the cleanest food sources we can, and my wife dresses me in all organic cotton.

The Human Upgrade: Episode 1127

[00:30:06] **Dave:** That's good.

[00:30:08] **Ben:** Yeah. What else? We exercise, so we're sweating. There's a detox process with that. I would say we try to get a lot of sleep. I don't even bring my phone upstairs.

[00:30:20] **Dave:** Okay, you're doing a lot of good lifestyle stuff.

[00:30:24] **Ben:** Yeah, exactly. I guess I'm more on the removal side, not necessarily adding things to it, but what can I eliminate on the removal side. Simple stuff.

[00:30:38] **Dave:** Do you drink tap water?

[00:30:41] **Ben:** Do I drink tap water? So this one's tricky because we have a one-year-old and a three-year-old. I was always doing glass-bottled water before that, but now that we have them in the house, we do get bottled Fiji water. At least it's got some minerals. That was my thought process of like, they can hold it. It's got some minerals. I don't know.

[00:31:01] **Dave:** Okay. It's bottled water. Okay. So you're not drinking tap water. So you're doing a bunch of stuff, relatively clean lifestyle, but you're not doing supplements. For listeners, probably the single most powerful old school thing you could do for your joints would be gelatin or collagen. And I made collagen into a billion-dollar business. And one of the reasons you--

[00:31:25] **Ben:** You did.

[00:31:25] **Dave:** Yeah. And I'm happy I did it. Lots of companies benefited, but it someone had to talk about all the benefits. The reason that I--

[00:31:32] **Ben:** Well, I've had tons of that. I've had tons of that, so I would be-- that reminds me. Because of your product, we've been using that for, I want to say, about 10 years, so incidentally, there's collagen in it.

[00:31:43] **Dave:** Oh my gosh. Okay, so you're on something. Here's one of the things that inspired me to make that collagen, and I talk a lot about, I went to Tibet, and I had yak butter tea at 18,000 feet, and I felt like something turned on. And that led me down this path for Bulletproof Coffee. And my new coffee company is now Danger Coffee for a new listeners. And it's called Danger Coffee because who knows what you might do.

The Human Upgrade: Episode 1127

[00:32:04] You might even have a 42-inch jump even though you had knee surgery, like you do. So before that trip, literally, or I say on that trip, but literally seven days before I started walking around Mount Kailash, I had descended 7,500 feet in Nepal in one day, and the cartilage in my knees was so bruised, and I was still dealing a lot with knee pain and knee problems that I've since resolved.

[00:32:33] In fact, it was a miracle. I could do this. My doctor, after my third surgery had said, be grateful you can walk. You're never going to be running or doing any sport again. And I was 23 when he said that, so I was pretty stoked. I had trekking poles, but I couldn't walk across the street to get a pancake.

[00:32:48] I was ruined because my knees were so bad. And I realized I'm not healing fast enough. It's very high elevation, and I'm in a bus and we're driving towards Lasa. And I know in LASA we're going to get a four-wheel drive and drive five more days. But if I can't walk, what am I going to do?

[00:33:05] I'm going to not be able to go to Mount Kailash. So we stopped at this little mud hut, and it's unimaginably not developed at the time. And there's three mud buildings, and that's where we're sleeping, that's where we're eating, and that's it. And everything is cooked over yak dung. That's the only heat source there is.

[00:33:23] It really was that way. And I asked the Chinese guy, Jerry, who I was riding with who could read the menu, hey, what does it say? And he reads everything on the menu, and they had pigs ears. I'm like, that's collagen. I'm going to eat some pigs ears. I've never had pigs ears before. So I get it. I don't know what to expect.

[00:33:42] And it's just a big bowl of 16 boiled cold pigs ears just sitting in a bowl. And I'm like, this is the most hellish-- what was that show that Joe Rogan did? Fear Factor. It was like a Fear factor episode. So I'm like, oh. And I ordered some soup, and I'm dipping them in the soup to warm them up, and just-- anyway, I ate all 16 of them.

[00:34:04] And the next day, pain was 50% gone, and I could move. And I kept healing after that. And I was able to do 26 miles at rough terrain around the mountain. It still hurt, but I could do it. And that's collagen. That's why it's so important. But the second supplement for people listening, I wrote about this one in Superhuman, in my longevity book, it's glucosamine, HCL.

The Human Upgrade: Episode 1127

[00:34:27] It's an old-school knee thing. It's not glucosamine sulfate, which most people sell. It's the acid form of glucosamine. It has very positive effects on blood sugar regulation, but for people with knee and joint pain, it's a very affordable old-school supplement that has had very profound effects for me.

[00:34:45] So if you were to say, I'm going to do Ben's program, I want to rewire and fix my knees, I would be doing 20 grams, maybe 30-- you don't need a lot more than that-- a day of collagen peptide. You can put it in your Danger Coffee. You can put it in a smoothie. It disappears whenever you put it in. Just get it in.

[00:35:07] And then I would be doing maybe even up to a gram of glucosamine HCL. And you might find a really meaningful difference in how your joints perform. Same thing, same time. Since we're sharing knowledge here, I'm want to be learning from you. I also want to be teaching people.

[00:35:22] A lot of joint pain that I'm finding these days, especially amongst people who have been vegan or very strong plant-based or even paleo, is they're building up oxalic acid in their joints. And this is caused by kale, especially lacy kale, and spinach, and almonds, and raspberries, and beets, and a lot of these, so-called superfoods. Even too much dark chocolate will do this.

[00:35:51] And so if you're waking up, you always have joint pain and knee pain, these are oftentimes the culprit. And I have been more careful since I wrote my last book Smarter Not Harder, included a lot about oxalic acid. I've been more conscious about avoiding this. It's in beans, and nuts, and grains, and seeds, and all that kind of stuff.

[00:36:10] And I'll tell you my flexibility, the amount of joint pain, it gets better and better. And I think this is an unacknowledged part of aging. So I would say avoid the more inflammatory vegetables that have oxalic acid in them. And by the way, I did tell Joe Rogan and his followers this when I was on his show, and seven years later, when Mike Tyson came on, I was talking about killer kale.

[00:36:33] Joe said, oh yeah, I had to quit eating kale smoothies because of oxalates. I'm like, yeah, I told you so, Joe. So this is one of those things where maybe it's not adding but it's subtracting, to your point. So if that's useful for listeners, -- hey, guys. I don't want your knees to

The Human Upgrade: Episode 1127

hurt. I don't want your feet to hurt. I don't want your fingers to hurt. And sometimes it's the veggies. It's probably not the meat. And sometimes it's a lack of a supplement. Or maybe you just don't know how to move, which is why we're going to go deeper with Ben.

[00:37:06] **Ben:** All right. That's great advice. And it seems like the collagen is that-- I said I didn't take supplements, but at the gym, we had your bars and the ready-to-drink shakes, which I love those things.

[00:37:16] **Dave:** Wow. Thanks, man. That makes me so happy, just to know that 10 years ago before we connected that it was making a difference.

[00:37:25] **Ben:** Yeah, so I think the collagen, I didn't think of it as a supplement because it's like a bar or shake. I was using it. If anyone on here has been a trainer, it can be long days, not necessarily time to go get food, or you're trying to stay in the zone physically.

[00:37:39] And so I lived off a lot of those bars and shakes. So it seems like the collagen would be good advice for someone. Like you said, you can throw it in your coffee. There's so many ways you can get it in. It's not like you're having to take a handful of pills or something like that.

[00:37:50] **Dave:** Yep. It's just a powder. It really doesn't taste like much, that's why it's good. Just make sure it's from grass-fed animals. There was a company that came in and started copying some of the stuff that I was doing at Bulletproof who was doing industrial chicken collagen, and it was full of metals and god knows what. So just grass-fed, guys. Buy from any brand you like. Just make sure it's grass-fed, or organic, or something like that.

[00:38:16] **Ben:** Awesome.

[00:38:18] **Dave:** All right. Let's move on. I've got some more questions for you here.

[00:38:25] **Ben:** Okay.

[00:38:26] **Dave:** How bad is a spin class for you in terms of what it's doing to your hips and your movement patterns?

[00:38:34] **Ben:** Not an expert on it. To me, it seems like cycling is a neutral activity for the knee. So there's some strengthening going on. It does limit how the leg would stride around when you're sprinting. So I try to advise people to then do, like I mentioned earlier, ATG split

The Human Upgrade: Episode 1127

squat. You're now letting that hip extend. You're stretching out the hip flexors. You're getting that front leg through a full range of motion.

[00:38:58] So something like that might balance out cycling. If cycling's what someone likes to do, then I want them to do what they like to do. So my whole purpose for the exercise is actually not to tell people exclusively how to exercise. I'm trying to find these common denominators that can help no matter what you like to do.

[00:39:13] But definitely, in working with a lot of people, I see that cycling, you would want to take some extra precaution to be flexible letting that leg come through a full stride. So like ATG split squat, couch stretch things, things where that quad and hip flexor get to stretch out.

[00:39:31] **Dave:** Some of the people in the Upgrade Collective, our live studio audience, are saying 42-inch jump. Did he just say that? Tell me more about that.

[00:39:42] **Ben:** So in basketball, the biggest measurable is your vertical jump. So not a box jump, but really how high your feet actually get off the ground. And in basketball, they're talking about with the running start. So I infamously had a 19-inch vertical jump in high school. I was ridiculed a lot in high school for how unathletic I was, and I've tested that up to 42 inches now, which is plenty for me to throw down all these dunks. So I think that's where the 42-inch jump was referenced.

[00:40:08] **Dave:** Okay. That's impressive. I have no idea what my jump is. I should probably test that one of these days.

[00:40:15] **Ben:** I don't think you need to test it honestly.

[00:40:17] **Dave:** Well, I'm tall enough. I don't need a jump. I just reach up and unscrew the light bulbs. Drives short people crazy.

[00:40:22] **Ben:** There you go.

[00:40:23] **Dave:** Until they sit in economy and I'm trying to sit next to them in a yoga pose, which brings me to yoga. Good for your joints, bad for your joints? What's your take on yoga?

[00:40:34] **Ben:** I think of yoga and strength training as a ying yang, so strength and flexibility. I just happen to train both those at the same time. You might take a yoga pose and a power lift, and

The Human Upgrade: Episode 1127

then you might see what I'm doing, be like, oh, that's both merged together. So my goal is to train my strength through the flexibility that my body has rather than to stretch with no load or then strengthen through a partial range of motion.

[00:41:04] **Dave:** That makes sense. So you're neutral on yoga is what I'm hearing.

[00:41:10] **Ben:** Yeah. This seems to have helped certain yogis who lack strength around the joints, so maybe it's painful to get into certain positions. I've helped a powerlifter squat a thousand pounds, so it seems to help whatever pursuit you're going to go after. But to me, I wouldn't do just yoga or just power lifting. I would see those as two qualities you would want to merge.

[00:41:36] **Dave:** Can you put one of your legs behind your head?

[00:41:41] **Ben:** Behind my head? I don't know what that-- oh.

[00:41:45] **Dave:** Like in yoga.

[00:41:45] **Ben:** My wife is here trying to show me what--

[00:41:47] **Dave:** Happy boyfriend poses is my yoga teachers call it.

[00:41:50] **Ben:** I can put my foot in my mouth.

[00:41:55] **Dave:** You're pretty close. But maybe as far as you could go. Just had abdominal surgery four days ago, so I'm not going to push, but you get--

[00:42:03] **Ben:** Oh, wow. Very impressive.

[00:42:06] **Dave:** Again, this is 15 years of anti-inflammatory eating and lots of collagen and functional movement and a bunch of other stuff like that. And my front split still sucks. How can I fix my front split? I got to even this out.

[00:42:24] **Ben:** Front split? Stretch strength, meaning-- so I can maintain a front split with two exercise. I don't have to stretch to maintain a front split. I work out a few times a week.

[00:42:34] **Dave:** You can just do that.

[00:42:35] **Ben:** Yeah, I can do a front split year round without having to stretch for it because I'm strengthening with my hip flexor stretching. And then I do other strengthening exercise with

The Human Upgrade: Episode 1127

my hamstringing stretching. And so you literally put the angles together. I literally maintain a front split off two strength exercises.

[00:42:53] **Dave:** That seems unfair and wrong on many different levels, Ben.

[00:42:58] **Ben:** Looking back, it is wild. Wasn't seeking a front split. Was just seeking to protect the body, be more athletic for basketball. And then after a while, I was like, holy shit, I can do a front split.

[00:43:09] **Dave:** How long does it take someone to develop that if they start working with you?

[00:43:13] **Ben:** It's like asking any how long question. Where are they now, what are the factors?

[00:43:17] **Dave:** An average person who's a weekend warrior.

[00:43:22] **Ben:** Two years.

[00:43:23] **Dave:** Wow. And that's daily practice or three times a week practice?

[00:43:28] **Ben:** We do roughly three times a week. But the days in between, if someone could do some extra work. A lot of people doing my programs now can do a front split or have gone from really bad to quite close to a front split. It's not like something I encourage people to try. My program doesn't have front split in it, but if the hip flexors get stronger through stretch and if the hamstrings get stronger through stretch, you improve at your front split. But I think of training--

[00:43:55] **Dave:** It's more like a side effects, like, oh look, I accidentally.

[00:43:58] **Ben:** Yeah.

[00:43:59] **Dave:** Yeah. Side effects are weird. Sometimes people come into Upgrade Labs to improve their energy, and if there's a side effect of they don't need a blood sugar lowering medication anymore, it's just a weird unexplainable side effect because only drugs can do stuff like that, right?

[00:44:15] **Ben:** Yeah, I believe that when you're addressing ability and increase ability, ability, ability, ability, then a lot of the malfunctions disappear as you go.

The Human Upgrade: Episode 1127

[00:44:23] **Dave:** Wow. You're encouraging me to start doing this, to doing your practices on a regular basis. It sounds like it'd be good for me.

[00:44:30] **Ben:** I'll film for you and just send you my advice on--

[00:44:35] **Dave:** Okay. I would like that. It's not like it's been a major big goal for me, but I like being flexible. I like having the flexibility of an 18-year-old. And when I'm 118, it seems like, of course you should want to do that. And if I'm not doing it, it means my longevity strategy needs additional work, not that my health span's about to end and it's the end of the world because I just don't play that game.

[00:44:56] **Ben:** Heck yeah.

[00:44:58] **Dave:** What about toes? I have really long toes. I should be able to play the piano with them. It is a curse unless you're a swimmer, in which case it's like built-in flippers. So my toes were always gnarled and overlapped because they're just crowded and one of them would fold under the others. And I've been wearing either Xero Shoes or Vivobarefoot or Five Finger shoes.

[00:45:24] And I just was able to tease Mark Sisson when I ran into him at a studio a little while ago. He's got a Five Finger shoe that's really nice. It's a new brand, and I'm forgetting the name. Sorry, Mark. But they don't make a size 16 unit.

[00:45:38] **Ben:** Peluva.

[00:45:38] **Dave:** What are they?

[00:45:38] **Ben:** Peluva. I don't know how to pronounce it exactly, but it's spelled Peluva.

[00:45:43] **Dave:** Peluva. There you go, Mark. Thanks, Ben, for remembering that for me. So basically, I've only been wearing those shoes for at least a decade, and it's helped me enormously. So my toes don't do that. And I learned how to straighten them out. But the Upgrade Collective, so many people, they have toes that curl under that don't straighten out, or they have toes that are all crunched and cranked around. How do you fix toes to fix feet, to fix knees, to fix hips?

[00:46:11] **Ben:** Yeah. The three basics I do is getting in a shoe where your foot can spread out. I'm a fan of using big toe spacers, at least when you walk backward, and ideally building that up

The Human Upgrade: Episode 1127

to some resistance. So you're pushing through the toes, they're spread out. You feel the foot muscles, the toes working. That's the extent that I do for it, those three.

[00:46:32] **Dave:** Okay, that's cool. So we get those three big exercises, toe spacer, walking backwards. And again, let's see. There's an episode, and we'll put a link to the number in here for you where I interviewed the CEO of Xero Shoes, X-E-R-O. They make amazing shoes in the US. Vivo is a European brand, a little bit more expensive, especially with all the fluctuations in currencies lately. And then there's the old Virium, Five Fingers. And then there's Mark Sisson's new brand Peluva, we think.

[00:47:04] **Ben:** Yeah.

[00:47:05] **Dave:** And so guys, all of those--

[00:47:09] **Ben:** And if you play basketball, you got my brand.

[00:47:10] **Dave:** Oh, thank you, Ben. What is the name of your brand?

[00:47:13] **Ben:** No, it's all good. It's called uncivilizedsneaker.com.

[00:47:16] **Dave:** And I'm sorry. You mentioned that earlier. I just didn't see it. So Uncivilized is just for basketball, or do you have other ones too?

[00:47:22] **Ben:** Just for basketball, but it's a clean, minimal design, and there's white, and there's all black. So no one would really notice if you're wearing the all black. And the whole point is that it's not a clunky basketball sneaker. It doesn't have the heel that lifts up. When you have the air pocket or pump in the heel, that's been found to increase your chance of ankle sprain by four times.

[00:47:44] It's not a theory. You're literally lifted up. So if you're playing basketball and you're lifted up higher, it just magnifies how far your ankle sprains. And then it's also foot shaped, so it's zero drop and foot shaped, but it does use nice sneaker tech to give you some bounce. I'm a big fan of Xero Shoes. This has more support. There's more cushion compared to a Xero shoe.

[00:48:07] **Dave:** These are cool. I did not know.

[00:48:09] **Ben:** Oh, thanks.

The Human Upgrade: Episode 1127

[00:48:10] **Dave:** Okay. I'm looking at them right now the Uncivilized. So I've been shouting out at all your competitors because I'm a really good podcast host.

[00:48:16] **Ben:** I wouldn't say competitors. All in the same, helping each other out.

[00:48:20] **Dave:** It's actually a rising tide that floats all boats. Fixing shoes is a 100-year problem for civilization because rich people used to wear pointy shoes to show that they didn't need to walk. And so we still mimic that.

[00:48:31] **Ben:** Oh wow.

[00:48:31] **Dave:** I'm sorry, ladies. Six-inch heels, they can be hot, but they don't have to be pointy to be hot. They can have a round toe that looks like a foot and a pointy thing, and your calves and your butt will still stick out. It's okay. Just wear those.

[00:48:45] **Ben:** That's the future.

[00:48:47] **Dave:** Yeah.

[00:48:47] **Ben:** My wife's feet are still natural, and that's hot. So there'll be guys like me waiting for you if you let those feet be natural.

[00:48:54] **Dave:** Exactly. Now, is Uncivilized Sneaker going to have a high heel model anytime soon? Because I know exactly three women who would wear it.

[00:49:03] **Ben:** No. We'll stay in our lane with the basketball shoes. I wore Xero Shoes. I love the CEO of Xero Shoes.

[00:49:09] **Dave:** He's great.

[00:49:10] **Ben:** And it was great. And it really fueled my ideas because I'm like, this concept needs to be in a basketball shoe like when you're on a hardwood surface. So yes, it's not natural to cram in the toe. It also wouldn't be natural to be slamming around on a hardwood surface. So these kind of things gave me the inspiration. My friends happen to be sneaker YouTubers, and their brand is called Uncivilized. So I'm like, maybe we should just make our own.

[00:49:35] I played basketball with them. We've traveled around the world playing basketball together, and it only took years and years for me to realize, geez, maybe we should just make our own shoe instead of complaining about it all the time.

The Human Upgrade: Episode 1127

[00:49:44] **Dave:** I love the way you're thinking. It's funny. Steven Sashen, who's the Xero CEO, I ran into him randomly at a restaurant in Boulder when I was hanging out with the CEO of Gaia Networks. I have a big show on Gaia that's doing really well, so I was out there. This is such a small world. Your Uncivilized sneaker, though, you only have size 10 through 13, and basketball players have giant feet. What are you doing, man?

[00:50:09] **Ben:** Kind of a startup. I'm 32, so we're getting there.

[00:50:11] **Dave:** These girly sizes, I'm telling you.

[00:50:15] **Ben:** My wife, we run everything together, so trust me. At our HQ, we have sizes six to nine, and then also 14, 15. We have those testing, and really trying to get the sizing dialed in right because you want people to have that nice big wide toe box. Yeah, so we're testing those sizes. It's coming along quickly now that we got it rolling.

[00:50:39] **Dave:** I will buy it for my son and for my daughter.

[00:50:42] **Ben:** Sweet.

[00:50:43] **Dave:** His feet are already too big.

[00:50:44] **Ben:** We'll comp them for you, of course.

[00:50:46] **Dave:** He incorporated my genetics, which is what children will do without your consent. I'm very triggered by that. But he stole my genes. Well, he's got size 14 feet already. And I'm like, poor kid. Do not want these giant feet.

[00:51:01] **Ben:** My wife will make a note right now. We'll send you a pair as your size.

[00:51:04] **Dave:** And my daughter, I don't know her size off the top of my head in men's, but do you have a women's thing coming up? These are very masculine shoes. All the shoes that are comfy? Actually, no. Both Xero and Vivo have some girl sizes. But what? Girls don't play basketball? Ben, you're triggering me again. I identify as trigger, just so we're all clear.

[00:51:24] **Ben:** I was born without a detection of design, so my wife really has a good eye for design, and she's making some really nice women's ones.

[00:51:35] **Dave:** Oh, she is. They're not on the website yet.

The Human Upgrade: Episode 1127

[00:51:36] **Ben:** I think she's going to do a phenomenal job.

[00:51:38] **Dave:** So you're in the early stages of this. And shoes that match your feet, you're going to see Uncivilized is a rising force that walks backwards carrying a sled, a good way of putting it.

[00:51:52] **Ben:** That's how you'll recognize us. Yeah.

[00:51:54] **Dave:** And also shout out, man. You're 32. You're an entrepreneur, and you've done all this biohacking on your movement. How long ago was it that your knees were just jacked and they basically said you're going to be fragile forever?

[00:52:09] **Ben:** Oh yeah. By 18, that was the final straw. Don't play basketball anymore, partially artificial left knee, thinking that was the end of any active lifestyle.

[00:52:21] **Dave:** And here you are about 10, 12 years later, and you're doing things that are not supposed to be possible. It took me a little bit longer. I recognized I was screwed when I was about 20 and I had surgeries at 21, 22 and 23, with a screw in my knee, and all sorts of stuff.

[00:52:39] **Ben:** Amazing job overcoming that.

[00:52:41] **Dave:** Yeah, and I just said, I'm not playing soccer anymore. I don't even have an ACL in one knee. I don't care. Maybe it grew back. I don't know. I can do plenty of fun stuff, but it took me a long time to get to where I was pain free, and you did it much more quickly, and you're starting a company still relatively early in your career.

[00:52:56] So wishing you the best of luck. And if you ever get stuck or you're going to take venture funding from some group or whatever, and you just want to make sure the fine print is going to keep you from getting screwed, I'm an expert at getting screwed, so I could share that with you.

[00:53:16] **Ben:** That is extremely kind of you. And yeah, I've been in the trenches on this stuff. My wife is a much better entrepreneur than I am, so we're very fortunate to have each other. Exponentially better than if I was trying to do this on my own.

[00:53:29] **Dave:** Just know there's other entrepreneurs who have been down the road who are happy to help if you need good advice.

The Human Upgrade: Episode 1127

[00:53:35] **Ben:** It's seriously helpful to know that you're willing to do that.

[00:53:38] I feel like we haven't talked about hip stuff. I was going to say we're getting up to the end of the show, but we talked about knees, we've talked about feet, a little bit about ankles, and all that, but what about hips? I know you're going to tell me the big three, but what are the other things?

[00:53:54] I see a lot of banded squats. I see people in gyms usually on Instagram with uncomfortable camera angles doing on the ground splits, banded splits, I don't know what you call that, butt together knee things. What's the way to have healthy hip flexors without necessarily wanting to grow a giant caboose?

[00:54:16] What's the right modern word for backside? Junk in the trunk. I'm just going to make myself get further into the inappropriate comments here. Upgrade Collective, you've got to help me. What's the appropriate yet slight-- booty. Thank you, Laura. Booty. That was what I was looking for. I'm blaming this on my lack of nootropics today. I've only had two shots of espresso from Danger Coffee. So anyway, I don't want a big booty, but I want strong hip flexors. What's the recipe?

[00:54:44] **Ben:** Well, what I learned from all the other stuff was the premise that the body was designed to work. So first, if something broadly is not working well, I'm going to go on the presumption that we're messing that up somehow rather than think we need some expensive, secretive method of handling it.

[00:55:02] So if you look at the hips, crap. Pretty much, all of us are sitting too much. Tech jobs is now-- even if you don't think you work a tech job, you're like, oh shit, I work a tech job. And so it's sitting a lot and hunched over, and the hips getting stiff. Also, modern lifestyle, we don't tend to keep sprinting, which seems like something we wouldn't have really had a choice out in a paleolithic lifestyle. Everyone would have to keep sprinting from time to time.

[00:55:29] So things definitely seemed to stiffen up. Even from the time where kids were sitting in chairs in school. So sitting on the floor would be more natural, like you would do-- you watch most hip mobility workouts, like, oh my kid does that every single-- my three-year-old already does that naturally. He does all those hip mobility workouts just by sitting on the floor naturally.

The Human Upgrade: Episode 1127

[00:55:49] So sitting in chairs rather than the floor and not sprinting anymore, just from like a common sense viewpoint, it seems to me like those are two pretty big deviations. So I already mentioned this ATG split squat. And as boring as it is to say it again, it allows you to stretch out those hip flexors but in a loaded position, in a strengthened position.

[00:56:08] So rather than being like the solution, everyone on here, go sprint right now. Come back. I guarantee you 10 people are walking back in here with an injury. It's just to jump right into that. It sounds great in theory to say everyone just starts sprinting. I would say identify what occurs when sprinting, how those hip flexors get to stretch out and they have to be working actively.

[00:56:30] And then maybe we can start bringing that back up. Maybe you do want to sprint, but maybe you don't. I don't want to force someone to have to sprint. I like every one exercises that can scale, so that ATG split squat. And then I even do like a seated good morning, but where I'm trying to keep my posture and stretch out my inner thighs because it would've been natural in school to be resting in a deep squat.

[00:56:54] I was sitting on a chair instead of resting in a deep squat. So most people don't realize their inner thigh muscles-- it'd have to be 99% of people's inner thigh muscles are tighter than they would've been if we were sitting around a campfire, eating in a deep squat position. And so I actually help a lot of back and hip cases by not only doing this deep split squat, but also by doing a deep seat- if you sat in your chair and you tried to reach forward and touch the ground, you would feel a bit of a stretch.

[00:57:19] So if you sit in your chair and from a sitting position, try to reach and touch the floor, now put dumbbells in your hands, and if you're keeping your posture, you'll notice it start to stretch your inner thigh muscles. So that's one that I think-- there. Yeah, someone said on the chat add adductor muscles.

[00:57:37] **Dave:** I haven't tried doing a squat since I had hernia surgery five years ago, but it looks like I can still do squatting like this. You're saying we should be sitting hanging out-- for how long in this kind of squat?

[00:57:52] **Ben:** I don't actually advise people when or how long or if they should rest in a deep squat, but the way that I do my strength exercise restores and improves that ability.

The Human Upgrade: Episode 1127

[00:58:02] **Dave:** The ability to [Inaudible].

[00:58:05] **Ben:** Exactly. So for me, it's like the way that I exercise addresses the strength through flexibility of these various tissues to mimic-- because even if you do it now, this should have been something natural for the last 40 years. Maybe someone over does it and now their knee or their hip hurts. I'm not an expert in right now how do you mimic a paleolithic lifestyle? I don't know.

[00:58:28] But with whatever you spend on exercise, 10, 20, 30 minutes, day, whatever it is, even a few times a week, by learning some of these stretch strength exercise where you're strengthening through stretch positions in directions that we would've had more ability, that's just how I exercise. And sure enough, I can do that perfect resting deep squat, and I mentioned front splits and various things. Those were side effects of stretch strength training.

[00:58:58] **Dave:** Okay. I get it. So you do the basic three things. You're going to have more mobility and all this stuff you want to do. It took me about five years of yoga practice to be able to just comfortably drop into a squat and hang out there for five or 10 minutes.

[00:59:16] **Ben:** And that's fantastic. And that's a really worthy goal.

[00:59:21] **Dave:** Yeah.

[00:59:21] **Ben:** And I just help people get there by doing strength training actually.

[00:59:25] **Dave:** So I didn't believe it was possible because I never could do it as a kid because I had arthritis diagnosed since I was 14 and I had so many injuries. So for me, it was partly overcoming actually proprioceptive fear, the fear of my joint. My knee would say, I'm going to send pain signals even though there's no risk, just because I've been injured so many times.

[00:59:48] So it was calming the knee, learning how to do it properly. But it was years of several yoga things a week. And of course, with yoga, you're doing breathwork and all that kind of stuff, and I don't do it regularly anymore, but once the patterns are in, it feels like you can do it. I imagine, barring injury, to be able to do that another 25 or 50 years from now.

[01:00:10] When people do your techniques, are we getting the movement patterns imprinted? So even if we stop walking backwards every day, are we still going to have functional movement patterns even if our muscles get weaker? Or do we go back to our old habits?

The Human Upgrade: Episode 1127

[01:00:24] **Ben:** Well, I think it would relate to what lifestyle you're living. So I really advise people to make it part of how they exercise. And it doesn't have to be a lot of time. And when it's working well for you, the more protected your body gets, the easier it is to stay fit. So I would at least say that the effort you put in would take exponentially less time to maintain. I wouldn't advise anyone to just stop doing this stuff, but I would say that it would take less and less time to maintain the better you get at it.

[01:00:59] **Dave:** So if you're planning to have a family, you should do all this before you have kids because you're not going to plan to stop exercising. You'll just have kids, and then you probably will. Because, well, that's what happens to most people. I'm seeing all the people with kids laughing and everyone else going, what are you talking about? So the amount of free time you have is not what you think it is. So getting it early--

[01:01:17] **Ben:** Very true.

[01:01:17] **Dave:** Is good.

[01:01:18] **Ben:** That's a great point. You were making a great point, though, because you made me think about my kids. So now I'm on my hands and knees and in deep squat positions and all these things that I couldn't do before that I actually help a lot of parents who can't. Those are my favorite wins of all, when a dad is like, oh my gosh, I had my daughter on my shoulders at the park this weekend without having to have my knee braces. Or I'm able to bend my knees and rest in a deep position with my kids playing.

[01:01:45] So by the nature of it, the tougher and more strenuous that was for your joints, that would probably be difficult, so the better you get at it. I see what you're saying now. The better you get at these things, those patterns you might now be in and use. So I suppose it would be possible, but since this is how I exercise rather than a short-term rehab protocol, this is just how I exercise, I never thought about what happens when you stop.

[01:02:12] **Dave:** All right.

[01:02:13] **Ben:** It would seem like less is needed to maintain. And with the one-year-old and three-year-old now, we have to carve out our time that we try to get in three exercise sessions per week, whereas-- so it's pretty easy to maintain for three times a week, 30 minutes. I know now

The Human Upgrade: Episode 1127

it's like, wow, I can maintain stuff now off this time that I used to have to work out much longer for.

[01:02:33] **Dave:** Yeah. You start focusing on efficiency, and then like, oh, for me, I would rather do three one-hour neurofeedback sessions and train my brain than do the physical stuff. I'll do the minimum necessary of each to get the maximum results, but that's what I'm asking there.

[01:02:47] **Ben:** Cool.

[01:02:48] **Dave:** I'm seeing one other question here from the Upgrade Collective. And if you're listening, you could be in the live audience right now. Go to our upgradecollective.com and sign up. It's easy. You get a bunch of free stuff that I teach you how to do, and then you could hang out. It's fun. So the question is, what about shoulders and wrists maybe, or elbows? Anything going on there? I know shoulders are vaguely connected to hips, but do you have things for shoulders that are as revelatory as knees over toes, like shoulders over nostrils, or something like that?

[01:03:22] **Ben:** I was faced pretty early on with a lot of pressure to fix shoulders because people locally-- I remember like one family, the kid, they thought that he'd never be able to play baseball again. Shoulder surgery, years later still couldn't come back, couldn't play baseball. That's a lot of pressure. So I took it very seriously and tried to become a master of my craft in terms of the shoulder.

[01:03:44] And for example, for him, with his shoulder, we simply created a strength training regimen that was the opposite of throwing a baseball. And it worked great. I'm not kidding. Yeah, so one exercise strengthened-- for example, you have muscles, you have different muscles that attach in, and then you have muscles between your shoulder blades.

[01:04:07] When we think of our trap muscles, maybe you've heard of those, and you think of up here, but they extend down to just above your lower back, and they're very hard to figure out ways to train them. And especially with the modern posture, the average adult right now is as weak as a 10-year-old in those lower trap muscles just above the lower back.

The Human Upgrade: Episode 1127

[01:04:28] The protection you have just above your lower back, not you specifically, but the average person is that of a 10-year-old on an adult body, meaning our lower backs are just vulnerable. And those then connect up to the shoulder.

[01:04:40] **Dave:** Wow.

[01:04:42] **Ben:** Yeah. But everything I've mentioned, I give away everything I know. So on my YouTube, I think I call it how to reverse out shoulder pain. Boom. Everything I just described, you could go see in detail how to start at any level right now, how to reverse out shoulder pain.

[01:04:58] My YouTube still has no ad money. Never turned it on. Over a million subscribers. Never turned it on because I said when I started, I don't want you watching, take this pain relief. Ooh, nacho cheesy. All right, now let's fix your joints. No, I don't want that shit. So you can go on and not have to watch ads. If there's any minor ads, it's just what YouTube puts that I don't even have a choice, but I don't get a penny of ad money.

[01:05:20] How to reverse that shoulder pain or when we were talking about the hips, the two main ones that I think are the opposite of the modern hip lifestyle are ATG split squat and ATG style seated good morning. And there's just like tutorial videos on those, everything I know about them. So I don't want to leave someone hanging with any secrecy there on the shoulder. It would be a lot easier to watch the video if you were curious about that.

[01:05:41] **Dave:** I think you should turn on monetization. You hear that? I'm serious. Listen to my logic here for a second. Either that or partner with a couple of companies that make cool stuff. And again, you are because you talk about your backwards treadmill. So you're monetizing your--

[01:06:01] **Ben:** My wife is a fricking genius, so we've always done our business coaching people, and now we make our own equipment to help people with that, and we make our own shoes to handle that, and I can just stay there doing those three things very, very well, and maximize the quality of that, and we're very--

[01:06:18] **Dave:** Talk about those at the end of every episode. I don't know if you do that or not, but it's okay to talk about something that you care about enough to create a new product that didn't exist. And there's always, especially on YouTube and X is where you find the most trolls.

The Human Upgrade: Episode 1127

[01:06:32] They're not your customers. They're mostly like bored seventh graders. You just block them, and after a while, they just go away. They don't matter. But literally, if you care enough to make a product that's new instead of copy someone else's product, in which case you're just a parasite, then good for you, man.

[01:06:47] And anyone has a problem with that? They probably need to get a therapist. So it's okay to get paid helping people and you help them because you want to help them, and they pay you because they wanted to support your work and get something new they couldn't buy anywhere else. So it's actually win-win, and it's super ethical. So don't undersell yourself.

[01:07:06] **Ben:** So important that you're saying that because I used to have the different viewpoint, that it'd be better to just be a broke gym owner with principles that no one ever heard about. Honestly, my wife wanted a ring that I couldn't afford, and I was like, shit, I might need to start social media.

[01:07:19] I'm not kidding. I was not on social media. Hated social media. But there's probably people listening to this right now who need to hear that, like, look, go turn on a TV for an hour and tell me how many medication commercials you see. They are winning the marketing game. So fight back. Get good at marketing. That doesn't make you a schmuck. We got to fight back with some natural marketing here. And so it took me a long time to realize that. So yeah.

[01:07:47] **Dave:** It's true. You nailed it.

[01:07:48] **Ben:** I'm a hard marketer, but I'm hard marketing things that I know are going to help people more than the constant onslaught of medication ads that I'm seeing.

[01:07:58] **Dave:** You said it perfectly. If you make the best product ever that could change the world and cure every bad disease and you never tell anyone about it, you're still a failed inventor. Sorry, that's how it works.

[01:08:10] **Ben:** Well, you're doing us a disservice. Have some boldness. You deserve it. If you're trying to help people naturally, it's almost a catch 22 for some of us. I'm more of a pushover, honestly. Whatever. My natural stay is more like to let someone push me over. And I have strong feelings of empathy towards people.

The Human Upgrade: Episode 1127

[01:08:31] And so I think I felt bad about how I'd be seen if I seemed like I was pushy or salesy. So it's almost a catch 22 that you might be out there with a lot of ability to help people, but you might need to shift your viewpoint on also being bold about that. I didn't quite explain but I think by--

[01:08:48] **Dave:** You got it. If you believe in what you're doing, if you're right, you're right, and you should be unapologetic and you should explain that you're right in the most elegant way that makes it accessible and believable to help people.

[01:09:00] **Ben:** I was saying probably not a lot of us on this call want to be politicians is a good way to explain it. If you're the type of person who's like, I want to control others or this or that, it's almost a catch 22 of the type of people, but we actually have to fight back and level up and be a bit more aggressive and bold. That doesn't mean you ever have to tear anyone down, and I think some people associate those two. So I would say be as bold as you can, and never tear anyone down, and you'll do great.

[01:09:27] **Dave:** Yeah. You don't have to do the Rogan cancel thing, where, oh, I don't like this person because they're selling something else. You never have to say a bad thing about anyone. And where it gets really touchy is when someone's doing evil, like Monsanto. Should you tear them down? Probably. And I had to come to grips with that too.

[01:09:49] So sometimes you got to call evil what it is. The rest of the time, if someone's selling extra padded marshmallow shoes that don't work, you talk about why work better and how the stuff works, and enough people are going to listen, and we all do our best. So just don't be shy about building a business and a life-based on helping others that also supports you so you can do an epic job of supporting them. And it pays back over time. So if that's helpful, that's my knees over toes business advice.

[01:10:17] **Ben:** Beautiful.

[01:10:19] **Dave:** It's been really a great pleasure, Ben. I am going to get one of your backwards treadmills, and I'll try the split squats and see what happens.

[01:10:31] **Ben:** Awesome. We'll stay in touch on it. Thank you so much for having me on.

The Human Upgrade: Episode 1127

[01:10:34] **Dave:** You got it. Guys, thanks for listening. You learned some really interesting stuff about quick and easy ways that you can have a body that works really well for a long period of time, even if you sit down to listen to podcasts or something like that. So I'm looking forward to seeing you on the next episode of The Human Upgrade.

[01:10:52] And if you need some coffee, Danger Coffee, it's the most amazing coffee. It tastes awesome. It has remineralization of the beans so that there's more minerals in them, so you feel better. You get electrolytes, you got, I don't know how many minerals, and coffee tastes great, and you feel great, and it's amazing. And when you buy it, you support my work. dangercoffee.com. Thank you for listening.