

# Paleo Solution - 415

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Robb: Hey folks, six listeners can't be wrong. Another edition of the Paleo Solution Podcast. Today was a fun podcast and definitely a departure from the usual kind of protein, carbs, fat deal. Bill Parravano on. Bill is a guy that I've known for quite some time and we-- Apparently, we were each following the other's work kind of from afar and then we were kind of introduced to each other when our social Venn diagrams kind of overlapped.

Bill is a knee pain expert and he arrived at this from being a high level judoka who suffered a pretty significant knee injury. Then embarked on a process of learning how to effectively deal with knee pain. It's quite different than what you would get out of maybe the standard physical therapy scene or orthopedic scene, but it's fascinating stuff. I've got to say, the feedback that I've had from folks that I've referred to Bill has been quite good. Check this one out from Bill Parravano, the knee pain guru.

Hey Bill, how are you?

Bill: Good sir. I'm doing great.

Robb: Hey man. Thank you for accommodating my hectic schedule. We've been trying to do this since basically spring of this year. We finally made thing happen and super, super stoked to talk to you. I have had a variety of orthopedic issues including some knee issues over the course of a powerlifting career, a Thai boxing career and now my old dude jiu-jitsu stuff. Bill, give folks a little bit of your background before we launch in specifically with some more details. Give them a little bit of a broader background for you.

Bill: Got it. I got involved in the whole knee pain shtick as a result of dislocating my left knee four times. I used to be involved in judo. I traveled and competed internationally back in the '90s. Then December '98, got invited to go skiing and did a faceplant. Well, I was with skis on and ended up partially tearing the ligament in my left knee. Thinking I was invincible, I continued over the next several months to dislocate my left knee three more times in volleyball, judo and then finally softball.

In that last shred of ligament, ACL, that I tore in my left knee out. Finally, got to a place where I was like, "I should probably go to the doctor and get this checked out?" Went to an orthopedic surgeon for the University of Louisville, the sports

teams, Dr. John Ellis and he did the testing on the knee and he's like, "Yeah, we could do an MRI, but the ACL is gone." Scheduled for surgery a month later and had reconstructive surgery on the ACL, the ligament in my left knee and they took out two pieces of meniscus.

Well at the time, I owned a computer business and competed in judo, and now I had this knee thing that I wanted to figure out just so I can get back out on the judo mat and throw people again. That was the big thing that I wanted to do. That kind of launched me in a really different direction in my life where I started studying different modalities of body work. One that I really sought after was an osteopathically-based style of body work called ortho-bionomy. Ortho-bionomy was founded by a British osteopath who is also a judo instructor.

Robb: Oh, interesting.

**[0:04:54]**

Bill: Yeah, I know. He took a lot of principles of judo and applied it to an original osteopathic concept and developed an entire style of body work. That piqued my interest in terms of area of study. Simultaneously, I started studying a Russian style of martial art called Systema which had a huge emphasis on breathing movement and relaxation, as well as strengthening the tendons, ligaments and fascia in the joints. It was a combination of those things that I started pursuing just because, one, I like learning and, two, I wanted to get back throwing people.

That was 19 years ago. I kind of went headfirst into it with all of that and studied for about three or four years parallel, like thinking the Systema and ortho-bionomy were talking about two different things. Because one is a subtle gentle style of body work that functions with the body only in a position of comfort and the other is a very-- Systema focuses on increasing awareness, but can also be very brutal in some respects as many martial arts can be with a huge healing component to it.

There was one point where I realized they were both talking about the same thing of the opposite end of the spectrum meaning you had-- They were talking about the nervous system. They were talking about neurological responses that the body takes in and then it converts into some sort of tension pattern in the body. Taking your powerlifting, Muay Thai, jiu-jitsu, each of those require different types of tension patterns in order to function in the different capacities which your body wants to show up.

Well, sometimes, those tension patterns can actually be dysfunctional in a way that irritates the nerves in a certain area of the knee, the hips, the lower back, the ankles, the feet, the neck, the shoulders and it creates a kind of a cascade of

responses that the body is in as a result of moving into a sympathetic neurological state that sets up the conditions for the body to-- It's not sustainable for the body. The body breaks down, you're looking at a lot of other issues that happen as a result of this dysfunctional tension pattern that is manifested in the body.

I studied, I've been studying pretty much ever since in some capacity where I got certified in both the United States and in Europe in ortho-bionomy and I became an instructor of Systema back in 2004-2005, somewhere around in there. Just been kind of my kind of my deal, just enjoy it, enjoy learning about the body in learning about how to essentially unlock what is keeping the body stuck in this dysfunctional tension pattern.

Robb: Awesome. Awesome. We have some interesting overlapping Venn diagrams of folks that we have in common which is really quite, quite interesting. How did this kind of Paleo ancestral health concept get on your radar and how is that kind of woven into your overall strategy in addressing knee pain in particular?

Bill: Yes. It was 2010, at the time, I was living in Louisville, Kentucky. I was training at a CrossFit gym there, more along the lines of strength training that I was really getting into. One of the trainers there, a Quinn Henoch, physical therapist, had suggested-- I was getting to a place where I was hitting a wall in my training. The coaches there were like, "Well, send me what you eat for a couple of days." I put it in there and they're like, "You're not eating enough protein." I was like, "Oh. Whoa." That was kind of a big aha for me and that's where the whole Paleo thing.

Listening to your podcast, I was pointed from-- Derby City CrossFit. They pointed me in the direction of listening to your podcast and I was kind of going, "Whoa, this makes a lot of sense." This whole concept of inflammation and getting away from breads and just a lot of the stuff that contribute to systemic inflammation in the body. Kind of put that on the forefront, I was studying that, I got into your-- Got into listening to Loren Cordain. You had was The Paleo Solution was the first book, correct?

**[0:10:39]**

Robb: That was my first book, yeah. Yup.

Bill: I read The Paleo Solution and had such a dramatic difference in how my body felt, how my body performed, just the allocation of everything just improved. I was like, "Whoa, this is good stuff." Realizing that when the body is in a perpetual sympathetic state, a sympathetic response due to pain, inflammation is a natural result of that. If you can add in the component of this reducing

systemic inflammation by tweaking your diet and eating more proteins and good fats as a way of reducing systemic inflammation, it was just enhancing the clients that I was working with.

Robb: Totally, totally makes sense. I'm on the board of directors of an orthopedic, a clinic that started out as an orthopedic clinic, a bunch of orthopedic surgeons that really started looking at the evidence-based medicine in a pretty critical fashion and it mainly pertaining to low back injury and potentially low back surgery. But when they really started digging into the literature and they looked at five and ten-year outcomes for surgery versus non surgery, it seemed like the people not doing surgery were often generally doing better. It was not even a placebo effect on the surgical side, there were all kinds of problems there.

They endeavored to figure out a system that would keep people out of the surgical queue as much as possible and really saving that for the option of last resort. It was through the kind of the course of time that they got interested in lipidology and metabolic issues, but they still have a very busy orthopedic element to the to the whole clinic. The integration of this kind of lower carb, Paleo, anti-inflammatory way of eating has just been a game changer for them. It's interesting. I guess, we're always looking for confirmation bias and there we have a little bit more.

Bill: Well, they have a similar study with knees, with meniscus tears as a result-- Or looking at function of the knee, pain in the knee, whether you have surgery or not with the knee. They're coming up with very similar results as to what you just shared regarding the back.

Robb: I seem to remember some of those where they did a pretty slick deal, where they would actually do an incision on the outside, like standard incision, like they would do prior to the full scope and pulling stuff out. It was as blinded as you could possibly do and there was effectively no difference between the two groups in general. I remember posting that study a couple of years ago. One of my pals in the jiu-jitsu scene, he's a skier and does jiu-jitsu, but eats horribly. But he's like, "Oh, I can totally handle it." But he's had just this laundry list of knee and shoulder issues.

Man, he was angry at me for posting that because he's like, "Well, it helped me." I was like, "Mainly when you had surgery. You just took some time off," because the guy will do like three days and stuff like that. He's phenomenal, but I think he kind of burns the candle at both ends and he's still pretty young. He can kind of get away with the shitty diet, but not really. But man, he was angry at me when I posted that study originally.

Bill: I think there's a lot of unnecessary surgeries. I think we're both agreeing on that. Not all meniscus tears are created equal. You can have this bucket-handle tear that flaps over and locks the knee up. In some cases, surgery is necessary to kind of get you back into some level of function again. But sometimes, you could have a one millimeter tear in the meniscus and you could have a bucket-handle tear that's measured in centimeters that flaps over and locks up the knee and they're both meniscus tears.

But a lot of times, there isn't distinctions made as to the degree of tear or the location of the tear or the direction of the tear in considering the outcome that we're both talking about. They kind of do this blanket across the board and to be honest, the doctor does a surgery, they're getting paid. It's in their best interest to surgery.

**[0:15:33]**

Robb: Oftentimes, the patient wants the surgery. They think that it's going to be the quick route to getting over this thing. There's a push full on that for sure.

Bill: Let me make a distinction and this is a huge distinction I need to make when I work with clients is the difference between a mechanical dysfunction like a meniscus tear and pain. They're not the same. You could have a meniscus that's torn and the person has no pain. You can have a knee that is "normal" as seen on an x-ray, a CT scan or MRI and the person is in utter agony.

You have to make that there's like this overlap, go back to the Venn diagram, you have this overlap where you can remove the mechanical dysfunction through a surgery, but the surgery is not going to get rid of the pain. It can actually make the knee worse in many cases. I just want to make that distinction as it's important as we move forward in this call today.

Robb: Bill, somebody reaches out to you, they have some knee pain, what is kind of the process that you go through with that? My skills in these areas are very, very limited, but when I've worked with people in the past like in a physical therapy-type setting, oftentimes, people would have a philosophy of starting with the feet and then the ankles and kind of working their way distal to proximal and try to figure out if there's something downstream that's leading into this. Some people will start with that, go through the knee then look at hip and even low back function, trying to get a little bit more of a holistic picture. How do you tackle that process?

Bill: Well, think of it like we want to shut the vacuum off so we could hear the water dripping as an analogy. Meaning, we have to go to the area of the knee or the body that's screaming the loudest. Think of it like you would-- My daughter is

five, she falls, she hurts herself and I need her to point to where it hurts. It sounds like super rudimentary and like basic, but we have to address what's screaming the loudest first and create comfort in that area of the knee or the body that's screaming the loudest first in order to be able to look at what may be other areas in the knee or upstream and downstream that you're talking about.

I look at it strictly from a neurological pain perspective on how can we get the pressure off of the nerves in the area of the knee that is screaming the loudest. Working with clients, it would be like, "Okay Robb, you do squats or you do jiu-jitsu or you do Muay Thai, where in your knee does it hurt? Does it hurt in the kneecap? Does it hurt above the kneecap like a patella femoral type of syndrome? Does it hurt below the kneecap like a patellar tendonitis type of situation? Is it on the inside of the knee at where the knee bends or above and below or maybe outside of the knee above and below or the back of the knee like a baker's cyst?"

I need to know where the knee is screaming the loudest, where your attention is drawn to and begin to create comfort in that area of the knee first and foremost. That begins to shift the neurological state from a sympathetic to a parasympathetic state, allowing cooler minds to give feedback if that that makes sense. Because in a sympathetic state, the amygdala which runs the whole sympathetic show is screaming and there is not a whole lot of rational thought in that place. The person is just like, "Oh, my knee is in pain. I just wanted to get out of pain," which is why so many people would go for a knee surgery when they don't necessarily need it. They want the pain to go away. They don't necessarily want the surgery. They just want the pain to go away.

If we get the pressure off the nerves in the knee and create comfort, shifting a neurological state to a parasympathetic state, now all of the mechanisms for the body to begin to heal what's going on in the knee are there on line. It is like when you when you change your diet, you're essentially, when you reduce the inflammation, you're switching the body from a sympathetic state to a parasympathetic state which speeds up the recovery.

**[0:20:32]**

Robb: Bill, recently, I listened to STEM-Talk podcast. I'm not sure if you follow Ken Ford and the IHMC STEM-Talk podcast, but they had talked about these SPM, specific pro-resolution modulators. It was a new concept for me, but the fish oil seems to play a really important role with that. I'm blanking on the guy's name, the professor that they had on. But he uses some very low-dose aspirin as well, like 20 milligrams of aspirin, like taking a baby aspirin and cutting it in quarters along with some fish oil in it.

It seems to ramp up this kind of pro-resolution process because we need some degree of inflammation on the front end to kind of initiate the healing cycle on the back end. What do you do to kind of facilitate that process? That's kind of the first question. The second question, there's been some debate in the Interwebs that even though a ketogenic diet is clearly, it's very, very powerful in suppressing inflammation, like it down regulates the inflammasome pretty powerfully, there's some argument that it may suppress it to such a degree that we're not getting that resolution process on the back end.

Are you doing anything to try to goose that stuff on the one hand? Then what are your thoughts around the ketogenic diet potentially being stymieing the overall recovery process on the back end?

Bill: I think you might be talking above my pay grade.

Robb: Okay. Okay. Okay. Okay.

Bill: I don't go that deep into the nutrition aspect. Some basic things, a lot of times will help people tremendously. I'm looking at the client's awareness and experience of getting the pressure off of the nerves and feeling the shift from a sympathetic to a parasympathetic state. That's like the cornerstone of my approach.

If I can get their awareness there, which looks like people resting a little bit more, enough eating themselves up, if that's where my focus is on tooling my marketing and my website, my emails to bring people's awareness to that shift of what they notice, I think like all of that stuff, as far as like microdosing with aspirin and if there's science behind that, I'm all in support of that.

However, I think I'm-- Way back with some of the people with knee pain, like more in kindergarten that we could get, we can get some real basic stuff going and get some big results. If they choose to continue down that path and go to the level that you're talking about, I'm all in support of that. That's why I've referred people to you in your program and things like that because that's not the area where I lead with and the forerunner with or keep up on the latest technology with.

Robb: No. That makes sense. Again, this is very new stuff for me. I think you raise a really critical point there that at best, that is me literally the icing on the cake or maybe some sprinkles on the icing of the cake. It is not, not the cake, like reducing that sympathetic state, getting people generally out of that that kind of pain cycle. This is some of the interesting benefit I believe as I've read research on just recovery from a surgical intervention or even from something like a back injury.

A pain medication short term can make a lot of sense because the person isn't in such dire agony that the body actually starts dealing with that, that recovery process. But if they're really hurting quite terribly, it can really stretch things out much, much further. Getting that person to just a generally comfortable spot is clearly going to be a huge win and then some of these other techniques like stem cells or SPM modifiers and stuff like that. Again, I would definitely stick that in these sprinkles on the frosting that's on the cake at best.

**[0:25:21]**

**Bill:** Right. What I would caution anybody listening to this podcast is understand that when you have the conventional medical approach is one of pain management. They don't understand how to get a person out of pain and keep them out of pain. I don't believe that they're looking deep enough into the body as to what is the source of the pain that's causing this cycle, that's happening. If you just look at from a conventional approach of a pain management, you're kind of like a hamster on a wheel. It's not getting to the source of the pattern that contributed to the meniscus tear or the arthritis or whatever diagnosis it is, it's not getting to the source of what is contributing to that.

**Robb:** Bill, if you were to order out deficiencies that people are bringing to this situation that is bringing about knee pain, and I know that again, it can be a zillion different things, it could be patellar related, it could be related to interior articulation elements within the knee and what have you, but do you see this mainly being, say, a weakness issue, an overused issue?

Or how would you bucket different folks out like who is coming in and they've got a quad hamstring and balancers, they're just generally weak or they have not been taking that knee past a 90 degrees flexion under load for ages and then when they get exposed to it, they have a problem? What are some of the primary failure points that are leading folks into this situation of having knee pain?

**Bill:** That's a good question. I would have to say an imbalance. However, not in the way that you'd think. Immediately, when someone says, "Well, there's a quad hamstring imbalance or there's some other imbalance in the knee," the conventional thinking is, "Well, let's strengthen it. Let's strengthen this weak." Well, when you're looking at it from a neurological response and a sympathetic, the body kicking in in a sympathetic state, something doesn't go from being balanced to being weak, it goes from being balanced to something pulling too tight to protect the knee from getting injured further.



It's like instead of raising the bridge, we got to lower the river. That person that has the imbalance goes into an exercise regimen or physical therapy and they're strengthening the hell out of their knees or their legs to bring back the balance into the leg. Well, what they're doing is they're reinforcing a dysfunctional tension pattern displayed as signaling from the sympathetic nervous system. This leads to the joint binding tighter together, that the joint-- The knees will feel tight. Clients will say, "I feel like there's a band around the front of my knee or the joint feels thick or sore or painful or burning or shooting."

What ends up happening is when we have that neurological response that's binding down on the joint, the synovial fluid in the joint gets squeezed out, which causes more pain, more rubbing, more irritation. The joint essentially gets dehydrated and that is your diagnosis of all arthritis. All arthritis is dehydrated joint.

When you talk about martial artists that did the kick when they were 13 and they ding their knee in some way and they've had that feeling in their knee ever since and they think that's just normal or that's just what happens is that you're inevitably going to have arthritis when you get older, that the joint is going to wear away.

It's a foregone conclusion that a knee replacement is going to be inevitable. It doesn't matter who you're talking about, martial artists or otherwise or what the diagnosis is, it's still the neurological response that we're looking at. It's causing the imbalance to be created the joint to bind down, the joint to dehydrate and the joint to wear faster.

**[0:30:25]**

Robb: Totally makes sense. That totally makes sense.

Bill: Yeah. That's the thing. I need to educate my clients on essentially that that the earth is round. Because they're coming at it from this place, "Well, what exercises do I need to do? What do I need to strengthen in order to bring the balance back into my knee, so my knee doesn't hurt?" But in actuality, the more they exercise, the worse their knee is going to get faster.

Robb: Until they get that kind of underlying pattern addressed.

Bill: Until they address the pattern and switching the neurology in the knee from a sympathetic to a parasympathetic state by creating comfort day in and day out, multiple times per day to begin to understand and trace back upstream or downstream from the knee as to where what's really going on.

Robb: Right. Bill, with that said, what are some things that folks could do just day to day to try to stay out of the knee problems? Again, I know that there's a ton of different knee problems. But clearly, on the one hand, just fundamentally, like the molecular basis of life like eat a pretty good diet, get some good sleep. But then from there, what movements, what activities you feel like are maybe disproportionately beneficial for the knee in general or is it a really situationally specific story where some people should be doing this, some people should be doing that?

Bill: Gosh, that's a really great question. Let me think about that. When I talk about getting the pressure off of the nerves, I've had a real challenge in my marketing, in my business as to what the column because it's not strengthening and it's not stretching. What we're essentially talking about is the intrinsic movement in the joint. The knee joint has a gross motor movement which is extension and flexion. Pulling your heel to your butt, extending your leg out straight. That's a gross motor movement.

But what nobody talks about is the intrinsic movement of the joint which is slight rotation, slight side to side, slight forward and back, slight apart together movements of the joint. That's when the body locks on in a sympathetic state and it impinges the nerves in those tiny planes of motion that then cause the pain. Most of your PT is looking at how can we strengthen the quads, the calves, the hamstrings, the glutes, the hip flexors.

They're looking at gross motor movements when the problem lies in an intrinsic movement of the joint. You can stretch, you can do yoga type-stretching, regular hamstrings quads and things like that which is beneficial. It's all good. I really like Kelly Starrett's approach. I think it's good. However, I don't see where they're talking about that intrinsic movement that is getting the pressure off the nerve. To directly answer your question, it would almost be specific to what's going on with the knee.

Robb: Got you. Got you.

Bill: Ido Portal has some phenomenal stuff as far as like sitting in a squatted position for a long period of time and stretching from that place. I think that type of work is phenomenal. I think as I mentioned before, Kelly Starrett, he has some amazing perspectives in terms of how that works. Ultimately, the level that I'm talking about, the level of scrutiny and discernment we're looking at in the knee joint comes at a felt level, a felt sense of what pain is and what pain is not, what tightness is and what tightness is not.

Unfortunately, when we've gone through days and weeks and months and years and decades of pushing the body and ignoring what the signals that the body is

giving off, it kind of leads us down this road where it's like how to get out of that place and how to lead the body out of that stuck place of knee pain is going to be really difficult to feel unless you start giving it a contrast of what comfort is as it relates to what the knee is experiencing.

**[0:35:38]**

**Robb:** That makes complete sense. Yeah. Ido is a good friend of mine and I'd followed him for ages. He's had such a fascinating synthesis of kind of methodologies out of kind of more traditional physiotherapy circles; capoeira, circus, gymnastics training. He is one of the first people that showed me some methodology like doing rotational squatting movements to load the meniscus in kind of a non-traditional way because we get so fixated even on super good movement patterns which is great.

But then if you're hiking or wrestling or something like that, when your knee goes at-- Your knee, your hip, your shoulder, all these other things, it's when they start deviating out of that ideal movement pattern and ideal loading pattern that problems occurred. Why not progressively overload some of those tissues in a way that's, again, safe and progressive and both get the neurological system comfortable with that, but also get the tissues conditions for some loading and those kind of non ideal but going to happen situations.

**Bill:** Yeah. I mean, completely. Most people, even if they don't work out, what type of surface are they're walking on? Concrete, it's asphalt, it's wood, it's all flat surfaces. The neurology of the body gets adapted to a flat surface. How do people injure themselves? It's some kind of freak step. They stepped off a curb, they stepped in a pothole or something like that. Some movement, that's kind of like you were saying twisting, turning a little bit and the body doesn't know how to adjust to that. The joint is dehydrated, the meniscus is dehydrated, which makes it even easier to tear.

**Robb:** Totally makes sense. Well Bill, I love your work. Again, it's fascinating, the similar the social Venn diagrams that we have and the folks that we have in common. Have been a huge fan of your work for a long time. Let folks know where they can track you down on the Interwebs. You've written several books and manuals on this topic, let folks know about that stuff.

**Bill:** Yeah. I put together a seven-day knee pain reduction challenge which essentially educates-- It brings that awareness where I give them one stretch that they could begin working with and bringing that awareness to the intrinsic movement of the joint and experiencing relief and noticing that neurological shift from a sympathetic to a parasympathetic state. They can go to [thekneepainguru.com](http://thekneepainguru.com) and they could sign up and take a short assessment and they go through seven

days of training that essentially shows them how to notice these subtle shifts in their nervous system and get relief in their knee joint.

If they do notice that, then I would say, hey, get into one of my other programs where I work with clients individually and in group formats to take them further to be able to help them, educate them, walk them down that path of what do they need to do, what are the subtleties and nuances of getting out of pain so you can enjoy your life instead of worrying and thinking about your knee all the time.

Robb: Awesome. Bill, what's your favorite social media hangout these days?

Bill: Uh, Facebook.

Robb: Facebook. Okay. Okay. God bless you. Oh man.

Bill: Well, no. Again, that's why I say uh. Relatively speaking, it's Facebook, but that's not to say I'm very social on social media.

Robb: Okay. Okay.

Bill: It's one of those things that I-- Yeah, I shy away from that because it gets to be a little bit of a circus.

Robb: But if folks go to [thekneepaingguru.com](http://thekneepaingguru.com), they can find how to track you down on the occasions that you are on social media and then they can find out your other offering sir.

Bill: Yeah. Yeah. YouTube is a real good one. I got a YouTube channel where videos about different topics.

Robb: Awesome. Well Bill, again, thank you for being on the show and thanks for being accommodating with the schedule. It's been a little bit of a circus on sounds like I'm both of our ends putting this together, but I'm super stoked that we finally made it happen.

Bill: Yeah. Robb, thank you so much.

Robb: Okay. Take care. We'll talk to you soon.

Bill: Okay.

Robb: Bye-bye.

**[0:40:32] End of Audio**