Tony: Hey, paleo nation. I'm Tony Federico and you're listening to Paleo Magazine Radio, the official podcast of the original paleo lifestyle publication.

The fitness industry has had a long history with gimmicky equipment, from weighted phones, thigh masters, and shake weights to the vibrating belts of the 1950's and a horse riding simulators of the 30's. It's clear that unscrupulous businessmen have always been eager to make a quick buck of our fitness aspirations.

If you dig a little bit deeper, you can also find examples of people getting seriously fit doing things like farming, fighting, moving their bodies in generally functional ways. Today's guest is a proponent of the ladder school of thought, that functional movement routed in physical culture, martial arts, and sound exercise signs provides a legitimate path towards a stronger, leaner, and more useful physique. His name is John Wolf, and he's the director of fitness education for Onnit, a company known for embracing unconventional methods, whether it's fitness equipment, supplements or lifestyle design.

On the show, John and I discuss the shortcomings of the conventional fitness path, the benefits of a physical practice geared towards mastery and exploration, why he fell in love with kettlebells and why he's so excited to be developing training programs for Onnit.

In the second half of the show, I'm excited to be bringing to you our very first installment of a brand new segment, "Smart supplementation with Kamal Patel." Kamal is the director of Examine.com, a website that is completely dedicated to providing unbiased information about the health benefits of nutrients, supplements and foods. They accept no advertising whatsoever, and all the information comes from scientific journals that it meticulously scrutinize for accuracy and methods, motivations and results.

On this first segment, Kamal and I discuss tart cherry, a fruit that could potentially be worth including in your diet. Before we get to all that, we have one more announcement. Today's show is sponsored by Essentia, maker of the world's only natural memory foam mattresses. Essentia mattresses are healthier, sleep cool, and are outrageously comfortable. Since I’m a podcast host, I didn't want to just read ad copy, I wanted to talk to their founder and CEO, Jack Dell'Accio.

My first question for Jack was why he got into the business of making mattresses, and this is what he had to say:

Jack: I opened my first business at the age of 25 right after graduating, and had a successful furniture and cabinet business. It only struck me in 2002 when I had people, my family going through cancer treatments that it was just a lot more exposed and aware to what hurts us out there, the needs of people that are going through different challenges physically.
My family was in the Latex foam business and I took on an interest and looking at solutions that were good for your health, good for the body recovery for obviously those that are going through real medical challenges. That got me into the RND in trying to develop something better.

Tony: Jack partnered with engineers and chemists to develop that something better. From the numerous testimonials and reviews from customers ranging from cancer patients to professional athletes, it sounds like he's achieved his goal and then some. To learn more about how you can achieve next level sleep on the world's only natural memory foam mattress, go to myessentia.com.

All right folks, it's time to get this unconventional fitness and smart supplementation party started. Grab your mace and handful of dark berries. Paleo Magazine Radio starts now.

Hey, everybody. Welcome to another episode of Paleo Magazine Radio. I'm here with John Wolf. He's the director of fitness education at the Onnit Academy. He's a master of unconventional training. We're going to talk about what that means, kettlebells, clubbells, sandbags, all that good stuff. First, John, welcome to the show.

John: Hey. Thanks for having me, Tony.

Tony: Let's get into your background before we dive into the unconventional training modalities and implements. Where did you come from in terms of your fitness background? How did you get into this world?

John: I spent sometime in my 20's going in the wrong direction physically, just due to being out and enjoying that part of my youth. When I decided to work towards being healthier and stronger again, I revisited when was I the most disciplined or physically fit in my life. I just recalled my youth and being in martial arts. Because it was more than just about lifting weights or having big muscles. It was functional and there is an application to it. It required more than just the effort of getting bigger.

Tony: It wasn't just for the aesthetics, if you will?

John: Yeah, exactly. If that's the case, I'd have to say my roots are really from that early practice of being martial arts at a young age. I think that that's always really served me well, because that base that I had established when I was four is, there have been so many times where I wasn't really active or proactive in my approach to getting stronger or better, more athletic or even actively pursuing healthiest of all.

It gave me some bit of an advantage over or the people who'd be in the same situation. I'd still be able to go out and do things with the athletes or I'll still pretty strong for my size so I'd be able to go workout with people that obviously look a lot more intimidating than I was.

Essentially, when I got back into fitness or as a pursuit, I just found that there was the conventional logic behind, "This is what you do, you go to commercial gym and you hit the bench press and you sit there and end up talking to people and you're there, you would have hours and stuff."
Tony: Make some bicep curls in between conversation.

John: Yeah, that's really what it was man. You end up killing a couple hours at the gym, doing some traditional cardio and yeah you get stronger at doing those things, but they just left me at a point where I started seeing the same people around the gym and they're doing the same thing that they're doing five years ago getting less and less of an impact in terms of positive impact for what they invest in time and energy.

I just thought, "Man, there has to be a better way than to go down the same path, I'm going to get the same results that these guys and gals are getting." It just doesn't seem to be netting the same type of return that you'd hope for as you continue going down the path.

Tony: Yeah, exactly. We're not in this just to slowly staunch the bleeding, if you will.

John: No, I want to thrive man. I want to see results and I want to have a perspective that allows me to understand that there's a lot of different opportunities to improve myself. It's not just measured by if I can do eight reps in a certain bench press without rest or how big my biceps are. There's a lot of things in the fitness realm, in the movement realm that impact every aspects of life, the quality of life.

Yeah, I just turned it to active pursuit. I found that there was ... Back then this is early 2000, no, maybe '99 where I started finding information that was very out of the box. A lot of it came rather like the Eastern Bloc, Europe, or Russian trainers that brought content over or is that racking on research from the former USSR. That's when Pavel Tsatsouline was really hitting the scene.

I started seeing articles he would write in Muscle Media 2000. I was still reading all those conventional fitness magazines and I found his stuff and I was just really intrigued. I bought every book he wrote and I started implementing the stuff he was talking about and man, I just saw my body change."

Tony: What did that first introduction look like for you? It's probably hard for some people listening to this to believe it. The internet wasn't that big back then, it was just get and going, I think that's falling probably the first dot com boom. You're reading books. Where were you tracking down these kettlebells? How are you actually going about getting some of this equipment when it really wasn't widely available?

John: Thankfully, the first stuff I found was still geared towards a more meat heavy kind of [buy 00:09:39]. It was an unconventional approach to strength development using barbells or more traditional strength equipment. It was the programming and approach that was so different. It was lifting heavy everyday for a low volume.

It was pretty cool that way, but shortly thereafter is exactly what you had said, which was kettlebells. He have books on joint mobility, unconventional flexibility training with PNF techniques or where you do a contract-relax strategy for increasing not only flexibility but strength or control at those end ranges. It was really cutting edge to me and I thought, "Man, this is really cool." He said, "I'm going to bring these kettlebells to
market and if you guys liked all these stuff, you're going to crazy over kettlebell training." Man I did.

He came out with some stuff at Dragon Door, he came out with these kettlebells. I started swinging them right away. I end up getting my kettlebell certification 2003 and that's pretty early in the kettlebell game.

Tony: Yeah, definitely, an early adopter for sure.

John: Yeah, that was really I'd say the most linear path. Concurrently while I was going through that process the same year or maybe 2002, I got my cert in September of 2003 for kettlebells. In that same fall, I had gotten a certification for another system that was much more, see, it was even less conventional. Kettlebells now are very popular. You see them everywhere.

Tony: There's infomercials for God's sake.

John: Man, there's infomercials, they're pink, they're blue, you got designer kettlebells. We have some pretty bad ass kettlebells over here at Onnit. You have the Primal Bell collection or Legend Bell collection. My last name is Wolf so I'm a little partial to the Werewolf Kettlebell. It's 28 kilos though so not everybody is up for that challenge, I don't think so. As he makes it even more near and dear to my heart, because it's my preferred weight for most of my kettlebell training.

Tony: Did you have anything to do with that or was it just a happy coincidence?

John: It was a happy coincidence, I [crosstalk 00:12:03].

Tony: It's meant to be.

John: It was meant to be man. It was great. It's just shortly after I came on board they were going to release its ... It put a smile on my face suddenly, so. Yeah in 2003 I started down another path of study and where kettlebells are popular. Now especially they're already growing popularly really fast. Swinging clubs was not and still is has yet to really take its placing in the market. I was swinging, as you said at that time these clubbells are a product that a gentleman Scott Sonnon had designed, and I'd went through his education system.

Man, I just found it was challenging me in a lot of different ways. The kettlebells plus a lot of this ground-based movement. At swinging clubs, I found the balance between those things. I felt, "Man, this is just really an exciting time for me to be able to integrate all of these."

Tony: Maybe started to feel more like you're in your martial arts practice again?

John: The combination provided me exactly that experience, Tony. I just felt I was able to move well, I was strong and a variety of different plains. I didn't feel like it wasn't practical or didn't have an application. Then the pursuit of both those certifications the same year, I found that same level of discipline, focus and it was a great transition. It's like going from
my youthful party time to almost like growing up to this transformation in the pursuit of fitness. It was great.

Tony: Some of these things like you mentioned, the kettlebells and the clubbells or the steel clubs, they really have their roots in some ancient traditions. They're new, but they're more like you said new to the west. These are things that have been, for example kettlebells have been used in Eastern Bloc countries. Then even before that, in agricultural applications, do you have a little, maybe some history of some of these implements just to fill people in on where they originated and where they came from before they landed in our modern unconventional gym environment?

John: Yeah, definitely. I think more than anything else, most of these things they have practical application and historic value in that sense. We've evolved or survived as a results of using some form of these tools, arguably, especially with clubs. You think even a caveman can do it, clubs.

Tony: Yeah, that's the thing. That's his gear right there at club [inaudible 00:14:50].

John: I don't know. If I was a caveman, I'd have a club, but I'd probably just go free everywhere. Yeah, arguably, our hands evolve to swing clubs and throw stuff along with our evolutionary advantage of having that opposable thumb, but that's the argument was that that was the reasoning is to how that had evolved was to be able to throw with efficiency and swing an object for survival purposes.

Tony: Yeah, not a lot of other animals do that.

John: Yeah. That was some research I had found really stimulating, whether that's true or not, so if someone have in that theory, it brings to light something that I think people experience when they start doing these things. That is there is this connection to the way you feel your body's suppose to work. Kettlebells you said, agricultural use, so it was a weight. Literally, "Hey, I got this much grain." You put a pood on the scale and you put the grain on the scale, you got a pood of grain and a pood is just a measure of weight that was used in Russia or Eastern Bloc a lot of times for those purposes.

Clubs, again caveman, you go back that far, but if they've continued to be a source of strength and power on the battlefield for a long time, and your evolutionary use of it is a weapon, it was refined in multiple phases of medieval times you'd see different variations of the tools or weapons, but essentially that's what it was. Then you find that in the Middle East that they are used in certain physical culture practices and martial practices. In different incarnations, clubs, they had long clubs, the stone clubs, they had clubs that were chronicle or it had took it on a bunch of different variations.

Tony: Yeah, I've got a buddy who's Iranian, he said his uncle was a wrestler back in the old country and they did this club training as part of their training regimen.

John: Yeah, man. I may be dating myself, but I remember in the 80's, early 80's being a really young boy and they had The Iron Sheik. He'd come out with his Iranian meals and then the challenge was for any of the other WWF back then wrestlers to be able to pick up his clubs and swing on the ... I don't think anybody had ever actually really beat him. I think
you know what, he just cheat. If you started doing good, he’d kick you while you’re trying to do.

Tony: That sounds about right. An eye gouge or something.

John: Yeah, exactly. Hey, that’s funny to really even think back to the 80's and see it and popular culture at that point. Maces, where the maces come from, again battlefield, right?

Tony: Yeah.

John: Then Persian physical culture, they have places where they swing clubs and maces. Really heavy maces, stone maces or concrete maces on the end of the bamboo. It’s like a traditional strength development tool for wrestlers out of that area of the world. It’s funny to see how these things continue to evolve, but just like they evolve these weapons, they’re not evolving as fitness choice. I think that that’s what when we look at like, "Oh, that’s really cool with those all uses are," but now we could use them as they were.

This is the case of Onnit, which has been great since I’ve been here, I’ve been able to go through a new evolution of the clubs, and help refine some of the features of the kettlebells. The reason being is this, because these tools are no longer just weapons, so you shouldn’t be beating yourself up in the process of learning how to use it. The ergonomics are important, understanding or designing a system around their use and manipulating the dimensions so they appropriately fit into that system.

Rather than just saying, "Okay, this is a mace," and like I said all those other ones are stone or wood, varying densities and different shapes. There’s no consistency in terms of the impact of using them or the technique of using them. Using modern materials, you start to be able to have greater levels of consistency and start to have more freedom with the design of these tools so that they’re safer or they’re more effective or they’re easier to teach. It depends on what our goals are.

Because you can make a crazy mace. I see some on a friend that has a 7-foot mace. I will stand on something to swing it for one, and then if you make it heavy, there’s very few people that have any access to utilizing the tool, especially in a dynamic way. For our maces are relatively short and they go from 7-pounds to 25-pounds currently, I think I might be petitioning for a little heavier one coming up sometime soon. They’re highly accessible tools.

Tony: They’re not gimmicks is what I’m hearing?

John: Man, there’s a lot that’s going into the development of the education we have around these things. If you just had a mace, I think maybe you could think it’s just a gimmick. You might have access to one or two different drills that’s traditionally done. If you limit your scope of use to that, it can still have great application, those traditional exercises are great, but how does it fit into everything else?

With the new tools that we’re designing or we’re refining the design of them, it’s amazing how diverse the applications could be. That’s really the goal now is just show
people, "Hey, this is a tool and it's cool to have it, but it's cooler to know how to use it." That's the important thing.

Tony: That seems to be the big focus of the Onnit Academy. Obviously you got involved with Onnit at some point along the way, I guess relatively recently in the overall scoop of your career and life in the fitness world. It seems like the dedication to education is huge and something that's a little bit unusual for a company such as Onnit that produces products. A lot of times, you'll see a company produce something and then they just leave it at that and they let other people figure it out.

You guys have taken that education piece to a really high level. Just to go back to a couple of the things that you've mentioned, multi-planner movement, functional movement, incorporating mobility in with strength, what are some of the physical benefits, the physiological benefits to using some of these supplements whether it's a kettlebell or a steel club, or a mace?

John: If you look at conventional strength training, it tends to be very linear. The opposite of the keyword you said multi-planner. Then it also is developed around one particular aspect of loading the body, which is compression. Compressive forces help build bone density, help build a muscle tissue, that's great, it's all awesome, but the one thing about that that is hard to anticipate over time, because you feel like, "Hey, if I get stronger I'll be better as I continue to progress."

I think this is the missing component in a lot of the people at the gyms I see, there's nothing wrong with hitting the traditional cardio, there's nothing wrong with doing traditional strength training or even body building training, but the missing components to a holistic approach were holding them back from the potential and even the pursuits that they wanted to go for.

We feel that is exactly some of the key points you talk about. We have to move in as many ways as the body's designed to be. You have to move through those plains and those ranges of motion regularly for your joints to maintain a level of health, and also for the tissues of your body to maintain health, which requires them to be relatively supple.

When you think about conventional body building and the way that your body responds to it, people think about it. People where you have two [inaudible 00:23:46] and you either want it to be huge or you didn't want to be muscle bound. I think that right now, you're at point in time, a lot of these multi-planner unconventional exercises and the tools that are swung through different directions and use not only compression but traction. If I swing something, it pulls away from, right?

Tony: Yup.

John: What it's doing is literally destructing the joints from each other, pulling the joints apart. If your head rope's tied around your arms, two horses would be running two different directions, that type of force. Of course not so torturous. Obviously I wouldn't want to pull you apart, but as you swing something with heft and at a lever length, it starts to pull the joints apart and all the connective tissues that are attached to those joints are stabilizing and stretching and resisting that in the variety of different directions as you ...
Tony: Ultimately getting stronger.

John: Exactly. Getting stronger in a sense of resilience and not necessarily in the way that we thin k of stronger, because people think stronger and they think very objective things like, "Did you pick up this weight?" It's not like, "How did I pick up that weight? Would I be able to sustain that for a long period of time?" How is my body responding posturally? Am I deforming my body going through this process by reinforcing core movement habits and going to cause stress to my joints. All these stuff in balance with the traditional strength training program is super powerful, so mobility, longevity.

We have a course coming up late September here or 215, 2015 is called, "Durability." Basically, that's I think our key differentiators. Hey, you want to get stronger? Awesome. We can help you get stronger. A lot of people can help you get stronger, but we want to get you stronger within a system that allows you to progress longer. I think most people short change their ability to adapt over time. It's the consistency thing, but you're never consistent when you're hurt. Durability is the key I think for most people's progress.

Tony: Really, a lot of people are hurt all the time or constantly dealing with injuries. The answer often for them is, "I'm just going to rest or ignore it and then keep moving forward, keep doing the same thing without really changing directions and without exploring some of these other opportunities or ways to move."

John: Yeah, that's the reality of it. Then they exacerbate the same issues. It's like one of the terms, again, I refer back to Pavel because he was a good inspiration for me and he used the term called, "Greasing the groove." It was using the strength context where like say every time you walk by or pull a bar you did three pull ups. Then as you continued to do that, you grease the neural pathways, essentially make it easier to travel down that line. It's like riding a bike down a hill, right?

Tony: Mm-hmm (affirmative).

John: After a while there's compacted dirt and you ride in other people's tracks, because you're able to travel with less resistance down that path. The same thing here, neurologically your body becomes proficient in doing something. While unfortunately the same thing seems to hold true with injuries when it comes to ... When we're very linear to go on a path, those injuries seem to happen easier and easier with the same but less intense stimulus. Because the tension, the lines of tension, lines of force that are acting on our body, they're not just external.

For example, if I get somebody to do a squat and I want them to hold through to a certain technique, if I give him a barbell or kettlebell, your squat might look really good. As soon as I tell him to put down the kettlebell or the external load, they squat and they fall apart. It's not just the external force, not just gravity. Our body weight squats harder for them to do well than the load of squat is the internal lines of resistance that they can't control.

They use that external load to overcome what they lack in control. It allows them to tense up and fire off muscles that they wouldn't be able to do without that feedback from the external force. Now, at the mercy of not just gravity, gravity is not really was
holding back is how tensed they are in their body, how inappropriately or
dysfunctionally tensed they are in their body.

Tony: That's a rabbit hole right there man. Most people aren't willing to go down there.

John: You mean the squat or?

Tony: Just into that exploration that deep dive into their own body, because then you're
getting into posture, you're getting into how people carry themselves. I think that it's a
hard sell. I spent a lot of time, I still am a trainer and I work with people on a daily basis
and it just seems like in our society we're so programmed with the message of,"A good
workout is something that leaves you feeling like what you were saying, feeling beat up
or just really tired or really sweaty or really cardiovascularly or an aerobically
challenged," but to say, "Hey, let's slow down a second. Let's start really thinking about
how are you moving and how are you aligning your hips and your shoulders and your
neck as you go through whether it's a basic movement like a body weight squat or even
a partial lunge or something like that."

It takes patience. It takes persistence to get better at that stuff. You might be able to
speak a little bit to that like getting people to buy into the journey of, "Hey, this is a
lifetime. We're not just giving you a hard workout. We're not just trying to beat you up
today. We’re trying to make you better for the rest of your life."

John: Yeah, man. Hey, you know, when I started adapting these training systems and I started
implementing them in my business in California, that was a tough thing to get people to
buy into. We would do all these open chain mobility stuff, to prime the body, prime the
joints and get them, get people tuned in for 10 to 15 minutes before we got into any
type of interval circuit, strength training.

At first, people were like, "Man, do we have to do this?" Especially guys are very
uncomfortable moving their body in open space and self-conscious about it too
especially if you’re in a room full of gals and the gals they tend to move better, so it
doesn't help either. At the same time, they would be like, "Do we have to do this?" Even
if it was one on one like, "No, we don’t have to. I just highly advice that we go through
this process. I had to demonstrate why we were doing these things. Sometimes that
required a little harder hand and I really would enjoy using which was if we’re going to
argue about it I’ll give you what you like, but you’re not going to like it."

That was the way it worked out. Thankfully, those lessons are learned fast, because I
would only have to torture somebody once and then usually, "Can't we do that stuff
again, the circles and the range of motion, whatever it is?" I'm like, "Yeah, man. I think
we need to produce some recovery after that last workout." Going a little bit in the
direction they want but showing them that, "Hey, I'm doing this in your benefit," it took
that process for a lot of people. I understand, I don't learn lessons without pain. That's
the reality.

Unfortunately, these people are not learning the lessons even though they're in pain.
That's the tough part about it. That's really hard, because you can't make somebody
want to do the stuff. You can't make somebody want to take care of themselves. There's
so much built around the notion that we’re supposed to be in pain to make gain. No pain, no gain. Pain is just weakness leaving the body.

In the context of what you need to do on a battlefield and for survival or for the survival of those that you serve and protect, I get that. In the pursuit of fitness, it’s about being a better version of you and moving backwards in terms of your health, whether it’s creating some total stresses. The mission with the health of your cardiovascular system, you’re reducing the quality of your life because your joints are in pain. That is a rabbit hole, as you said. It’s a vortex. It pulls you in deeper and deeper.

People push and push and push until something breaks and there’s almost a sense of pride in it. It’s tough. We had a lot of people who would come and participate and then they might leave because they want to do something beyond their current abilities to sustain it. Then they would get hurt and then come back. Then unfortunately, you just always have to be ready to serve those people who are ready to be at that place, at that time.

My business was called, "Wolf Fitness Systems," and we had adapted the wolf as more than just the name, but it is part of our culture. You think I selectively use some of the traits, the pack animals, the fact that wolves mate for life, I played a little game with that and said, "You’re part of our community for life." It really didn’t matter if you win, if I’m trained somewhere else. It really didn’t matter if you felt that that was where you were served the best or somewhere else.

If we saw each other around the street or anything like that, you’re always part of our community and celebrated for that fact. It really certainly will, because a year or two go down the road and people came back because they needed what we offered again. Just I think that if you’re a trainer, it’s like anything else. You have to find the right people to serve, people that value what you have to offer. Then you have to understand, even though it’s a tough deal, not to take it personally when people find something that they think that they want to do other than what you have to offer.

Then be ready to serve again. It’s a great job. It’s a great gig, but you have to remember you’re there to support people.

Tony: It’s awesome man. That’s a great message. I’m glad that we’re recording all these. Sometimes I have the conversations just out in the world and I think that it would make a good podcast. It’s nice when those things all align and we’re actually getting on the air.

One thing that I wanted to just finish with is a sample or an example of let’s say somebody’s listening to this and like, "You know what, I’m tired of just doing the same thing. My shoulders hurt, my knees hurt. I’m driving myself into the dirt with the same old exercise programming day after day," some of that linear style training that you mentioned just maybe too much running or too much depending on a small handful of exercises with limited range of motion and dimensionality. What would be a sample workout? We could even just take the kettlebell. How would you run through a kettlebell workout with somebody whether it’s a group class or a one on one session?
John: Sure, it sounds great. The easiest thing for me just refer back to our general programming guide for Onnit Academy Level 1 Cert Manual. That's how it's in there. All of our trainers get exposes within the context of our educational system at the earliest level. As time goes on you get to fiddle things, but the questioning seems very broad. The broader answers seems to be the most appropriate, which is, "Keeping it holistic. Understanding the impact of different training modalities and finding the right balance is the key as far as I'm concerned."

There's a lot of things to account for. The easiest way for me to think about that is let's just think maybe we have kettlebells. Maybe the best way for everybody to attach to the outcome of a single workout is understand or attach the theme or goal to it. Let's just say, I wanted to have a squat heavy kettlebell workout. That being said, I would say that my primary focus in the workout is heavy squats. I keep track of kettlebell squats, two kettlebells.

If that's the primary focus, I'm going to build everything around that focus. Some people will do a lower body focus or upper body focus. A lot of times, I like to think about a single movement as being my primary focus, primary, singular in that way. It allows me to have to build everything around that. Let's just start at the beginning. I do some open chain mobility, which is basically just saying standing and I'm moving my body through large ranges of motions, see how my joints feel that day and where I'm tight and get those things to start working themselves out especially if I work at the office for the whole day.

Going head to toe, joint by joint, getting my neck, shoulders, back, elbows, wrist, knees, hips, ankles, getting them all moving and doing so and assessing, "How's my body feel today?" Because I might change my game plan as I continue going along. That's my check in. I tell people, "That's like being married and asking how your spouse's day was." Then not only asking, but actually listening to the response.

Tony: Yeah, that's the real challenge.

John: I want to listen and I want to be responsive. I don't want to be reactive. If something hurts, don't get mad at that body part, it was your fault. You think, "Okay, my shoulder hurts, maybe I won't press heavy today." That's what I mean to say. It provides that opportunity. Then, that's all it is, it's a check in, it's a warm up. Then what we'll do is focus the next phase. Our first phase of the training session will be open chain mobility. I might take 10 minutes doing that for the check in.

Then I'll do about five to six minutes of this very specific movement patterning. If I'm going to want to squat heavy, I want to get all the joints that are going to be relied upon all the connective tissues prepared to squat not only heavy but with really good technique. I'm going to do a variety of different drills we called, "Movement priming," that'll activate my hips, work my knees and some rotations so that I get those tissues to be ready to adapt to any variables one rep to the next.

Not every rep's the same. Sometimes, you push harder with one foot or your knee drops in a little bit on one of the squats. We want to get all those things to tighten up as much as possible. We'll do some movements that are pre-selected to help engage my body in
preparation of that primary movement skill. I'll invest maybe 10, 15 minutes of time in that primary set, really focusing a lot of effort, energy on a singular goal.

If my primary focus was to squat heavy, I might do either a single exercise of rep squats or maybe I'll compound that super set format, but they'll both be squat focused exercises to really create a very targeted training effect within that context.

Tony: Are you pretty flexible with your set and repetition guidelines or you're still doing the lower rep, I think you mentioned before the Pavel Tsatsouline protocols or are you just exposing yourself to a lot of variety there as well?

John: The nice thing about this and this is why I keep it vague is that there's so many different protocols and there's so many different goals. I'm just using more conventional context, but that goal can be the primary set could be targeting a variety for this. Maybe you want to focus on handstand training. A handstand training is like an overhead, static overhead push that allocate and that push context, then that would change the movement priming that we would do and potentially change the type of mobility we would do before that changer really allow me to do that better.

Maybe that's a static hold for a minute of time or maybe I'm doing squat training 20 rep sets. You know what I mean?

Tony: Yeah.

John: For a total of a hundred reps, with as much rest between as necessary or as you said, low rep sets. Maybe I'm doing 10 reps of 5 with really heavy weight. It all depends. Yeah, there's nothing butt flexibility. It's just understanding that by that primary set focus that we have to choose something to focus on or we have no focus, right?

Tony: Yeah, you're just going in all directions and not really doing anything.

John: Yeah, just running around the circle and I'm getting a good workout. That's what you said like I'm sweaty, I'll be sore and I'm exhausted, but I didn't have a specific outcome to measure that effort buy. If I wanted to be stronger in squatting that would cycle through something that focuses on squatting and that's the primary focus.

Then people still want to end up sweaty and tired, and doing so is great. I think you elicit a one type of training effect and you can do another as well. What we might do is we'll have a secondary set as a conditioning set. A lot of times we would all find this ... People come very heavy in one type of movement pattern because they're good at it. In the secondary set, we might mix up some different drills, things that are multi-planning right off the bats and maybe from squatting maybe I'll do a rotated hands like a windmill, open up the outside of my hips and then a push-pull or whatever the case is in a conditioning set.

It could be Tabata's, it could be circuit, it could be whatever the case is, but it's going to complement a specific focus of the workout. Then we're going to do a decompression. Decompression might be a yoga inspired postures to unload the tissues. What we do is we take into account the primary and secondary movement selection. We try to counter those movements specifically.
Say if I'm going to rotate a hand to that windmill position, my hip is kicked out and I'm folding in a rotated position. If I wanted to extend my hips in a rotated position and maybe a scorpion stretch might be something to look at, just to look at that context or from squatting I'm loaded in that deep squatting position where I meet my hips deeply flexed and my knees bent. Maybe I'll counter that my knees straight and my hips extended, that results some kind of a more of a back bend posture to hold and unload tissues.

We just look at countering of movements that we load it up to create balance for those joints and the soft tissue that supports all those joints, keep them in balance, keep them from referring tension and pain to the joint complex. That's really the whole workout there.

Tony: Nice man. That's awesome.

John: It might have take you just as long to explain it is, and just do it. Generally, all that's done in an hour, so.

Tony: If people are hearing this and then some of the terms aren't really clicking or making a whole lot of sense, it's what we're talking about before with the Onnit Academy. You guys got tons of videos online, really breaking all the stuff down. I'm just looking at on the Onnit Academy some of the things that you put out personally. It has everything from the warm up, stretching, and mobility to the skill focus, to the conditioning focus.

I like what you said about having a focus, having a direction when you go into the workout. You're moving purposefully, training purposefully, and actually getting better at something but then still moving around and adding a variety to create a robust physical body. John man, this has been awesome. Unfortunately, we're out of time. I feel like we could just have you on here and talk for hours, but if people want to check you out and find out more information about Onnit, that you need to checkout onnit.com. It's got everything on there. Is there anything else that you would recommend for our listeners?

John: Yeah, visit onnit.com. That's our main website, our store's there, you could see a lot of our cool products, fitness equipment and like, but make sure you checkout the academy tab or onnit.com/academy. That's our lifestyle hub, where we disseminate all of our, not only educational content, but a lot of high value lifestyle content that help you optimize yourself and get the most out of what you've been given in terms of your physical body and your mental capacities. There's just a lot of awesome content to help us grow as individuals and of course where I specialize all that fitness stuff.

If you're into it, make sure you check out Onnit certification. We got a lot of people that are end users. They're there for personal improvement, as we try to make it as approachable as possible. If it sounded complex, it's not complex. It is a lot easier than it sounds if we just are able to move together.

Tony: Awesome, man. Hey, thanks again for coming on.

John: Thanks, Tony.
Tony: That was John Wolf, director of fitness education at the Onnit Academy. For more information about John, Onnit, and unconventional fitness, go to onnit.com. Coming up next, smart supplementation with Kamal Patel. I am Tony Federico and you're listening to PMR.

Hey, everybody. I'm here with Kamal Patel, the director of Examine.com. We're kicking off a new segment. We're going to talk about a nutrient or a supplement and try to give you some tangible takeaways in terms of whether or not it's effective, what does the science say. Kamal, welcome to the program.

Kamal: It's my pleasure, Tony.

Tony: You wanted to talk to us today about tart cherry. Now, my thought is that could be a beverage. It sounds tasty. Maybe cherry flavored candy of some sort would be something I would be willing to try. What are some of the health benefits of tart cherry?

Kamal: I first came across tart cherry, because it's sold as a supplement and it's probably more often sold as a supplement than it is in tart cherry juice or the actual tart cherries. The other reason I came across it is because I was trying to learn French and the particular type of tart cherry that's often sold, I still can't quite pronounce it right, but it's, "Montmorency," in the English pronunciation.

I ended up doing some research on it, well eventually I have a page on Examine on it. The reason it's coming up right now is because just this past month, a fairly important study came out, it went under the radar a bit because I'd say that carb-oriented studies, fat studies, vitamin D studies, those got a lot of press, but dark berries are very ...

Tony: Underrepresented?

Kamal: Yeah, they're fruitful for a variety of health conditions. There's been a lot of research in the past five or ten years particularly with the blue berries, but tart cherry has some different properties. The study that came out this past month was on memory loss and dementia. Although possibly most people who listen to the podcast might not experience it, almost everybody has family members that do. It's just a natural process of aging, unless you actively strongly try to circumvent it.

It turns out that the compounds in tart cherry specifically benefit cognition and they do a bunch of other things possibly decreasing inflammation and some things like that. I personally would recommend tart cherry because it taste okay. It's not gross like BCAA's. I think it has a greater chance of having a wider array of health effects than your advert supplement.

Tony: Tell us about some of these specific compounds found in tart cherry juice. People might be familiar with anthocyanins and other dark colored pigments and things like blueberries. Are we looking at some similar compounds there? If so, what makes it more effective than other dark berries?

Kamal: The disclaimer is that for a lot of the mechanisms, researchers don't know exactly how they work. Is it for example a particular anthocyanin or is it that anthocyanin plus other things that haven't been separated out and tested individually? They don't really know,
but tart cherries have very high levels of flavonoids and also anthocyanins that have anti-inflammatory properties.

The main system that's targeted is the COX enzyme system, which is also targeted by Advil and pretty much everything else except for Tylenol. That's one of the mechanisms inflammation, oxidation, and that's what approaches issues like pain and also certain issues in the gut. Another thing is that cyanidin is ... The broad category is phytochemicals and then there's compounds that have an OH group is sticking out of them. That OH group, hydroxyl group can be long, it can be short like a long fatty acid or a short one.

It turns out that the compounds with shorter hydroxyl chains typically are a bit stronger than the ones with longer chain. That might be one of the dozens of mechanisms or reasons why tart cherry performs possibly better than other things like blueberry with the caveat being that they never test berries against each other, almost. We'll never really, really know, but tart cherry seems to be the number one, the alpha in terms of some of these effects.

Tony: Generally, when you're looking at some of these studies, they're taking a control group who's not receiving any active ingredient and then you're looking at the variable being in take of blueberries or tart cherry juice. What you're saying is they don't test them against each other, so it's not like there's a third group that's using another tart or another dark berry. It's just whether you're taking it or not?

Kamal: Yeah. It's actually a really good research issue that almost never comes up, which is in any field of study nutrition, surgery, whatever, it's almost always two groups, sometimes three or four. It's almost never two new intervention groups against a standard of care. You're not going to have cognitive therapy versus placebo, versus blueberry, versus dark cherry versus sweet cherry.

Ideally, if there was a ton of free research money in nutrition, then that would be done, but research money is typically used towards corn, grain, other stuff like that. It might be nice to test more sour cherry versus sweet cherry, because I love sweet cherries. I get the Trader Joe's frozen sweet cherries and they're cheap. You can't really make a tart cherry shake unless you love tart and I don't love tart.

Unfortunately, that means when people see studies like this, they'll think, "You better eat tart cherry if you're going to eat cherries, not these sweet cherries. It's actually not true because there are several types of tart cherries and there are several types of sweet cherries. Tart cherries have more phenolic compounds and also vitamin A and beta-carotene, but certain sweet cherry varieties have more anthocyanins than tart ones. You just can't predict which ones when you pull up a bag from wholefoods of Trader Joe's.

I'd say neither is necessarily better than the other one and tart cherry's been tested more. Because tart things tend to have more medicinal properties I'd say it's probably a bit better, but that doesn't mean sweet cherries are bad.

Tony: That's funny that you mentioned that. My next question was going to be, is the tartness itself a reaction to some of the helpful components? You said that sometimes that is the
case, is there anything ... I guess when you're tasting tart, what are you really tasting? Is that one of those flavanols or one of those other compounds?

Kamal: Yeah, so the cherry is because it has a higher acid content than the sweet cherry, now that you say it, it's not actually that bitter that you get from medicinal herbs because it doesn't have compounds that produce a bitter taste through else people when really eat it. It is a food that people eat that's just more sour. I'd say if we weren't so accustomed to sweet taste, it might be totally acceptable, but because we're not I'd say most people when really, really eat a ton of tart cherries.

The reason that's important is because you do have to eat a ton of tart cherries to get the dosage from these studies. To get let's say the cherry juice or the extract in these studies, you'd have to eat about 45 to 50 cherries per serving, and often two of those servings per day. That's a lot of cherries.

The difference is I don't really love to supplement a lot, so I wouldn't necessarily take a tart cherry supplement everyday, but if I were advising somebody who was older than of utmost importance is compliance. It's not very likely that somebody will eat a hundred cherries a day. I'd say a supplement or something like that.

Tony: Nice. Then obviously that's what you're getting with the juice, it's pretty concentrated with juice. I think a lot of people in the paleo world would agree with me, we don't drink a lot of juice. I think that that's just, you get on the paleo diet and you start to shun liquid calories outside of the occasional maybe hard side or here and there. For the most part, juice isn't part of the paleo diet. Is there any other aspects of dark cherry juice perhaps sugar content that someone might want to consider?

Kamal: Yeah, so the sweet cherries have more sugar than the tart cherries. If one word to drink tart cherry juice, I don't remember how many grams of carbs it has per serving, but it's not quite as much as cherries or something like apple juice. That being said, if somebody has weight issues or if that might be a gateway juice to other juices or those juices might lead to milkshakes and whatnot, it's not inherently bad. Some people need to eat more calories, but it goes into this general algorithm of what's most important.

If you're 60, 65 years old and you know your mom or dad had dementia possibly Alzheimer's or early onset Alzheimer's, then if you like juice, if it's easy to drink, it might be more important to do that than even make a shake or if you find popping pills to be easier. I think, actually, yeah I'm sure that there is also chewable tablets. That being said, I think they coat your teeth a bit. There's a few different forms.

One thing that has been [said to you 00:56:24] a bit more of these days is the freeze dried. I don't know if you've had those freeze dried foods at Trader Joe's.

Tony: No, is that like a Fruit Roll-Up type of deal?

Kamal: It's all the moisture gone.

Tony: Oh, got you. It's like the crispy thing?
Kamal: Yeah, so they have mango, blueberry, strawberry, raspberry. I sound like an ad for Trader Joe’s now but that's just my local store.

Tony: Are you working for Trader Joe's? Did Trader Joe put you up to this?

Kamal: Yeah, you might want to head to Trader Joe's after this podcast if you want, but I think those are cool because sometimes people have a hard time not snacking, especially if they're in the early stages of switching diets or changing habits. Those things do taste like candy. Now in our research, I just in the past [inaudible 00:57:10] there've been two or three studies that tested freeze dried fruits and they performed admirably. Adherence is quite high.

I'd say there is several viable options for getting the stuff into your diet and juice might not be the best one because it's liquid calories.

Tony: Awesome man. Why, this is great. I certainly learned a lot more about tart cherry juice, why I might want to take it, why I might not. Ultimately I think we certainly came away with some good information even about the scientific method. Whether you may or may not be an advocate for Trader Joe's. I think this is great man and love to have you back to do another one.

Kamal: Yeah. I'll think of something good for next time.

Tony: All right paleo nation. That's going to do it for today's show. Next week on the podcast, I'm joined by Dan Pardi of dansplan.com. We discuss behavioral models. He's worked with Dr. Dean Ornish and the realization that he had that literally changed his life. Here's a preview.

Dan: My father was diagnosed of cancer when I was doing cancer research with Dr. Ornish. I kept giving him information about how things that could help him and he would listen and be very proud of me, but he wouldn't do anything different. When he passed away I thought, "Okay, I used this opportunity to help my father." Never would anybody care more to help somebody that they love. I thought, "Okay, you can't cane behavior with information alone."

Tony: To learn more about how you can upgrade your human operating system, you'll have to tune in to next week's show. Until then, you can access our full archive of Paleo Magazine Radio episodes by going to paleomagonline.com. While you're there, be sure to check out the final piece of the PMR 30-day paleo lifestyle challenge, by listening to episode 26 of Paleo Radio Bites.

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We had two great reviews last week from Ruby Memphis and Silent Samurai. Ruby said that our show is one of her favorite go to podcast and that the usable information
beyond diet and exercise, as well as balanced perspectives elevated our show beyond the norm. Then Samurai said that he's enjoying our episodes and looking forward to more. Thank you Ruby and Samurai and remember to go to our show notes on paleomagonline.com/radio to fill out the form and be entered into our weekly drawn great chance to win a reader’s favorites cookbook including the 2015 holiday cookbook and a sweet Paleo Magazine vital card decal.

Until next time, I'm Tony Federico. On behalf of everyone at Paleo Magazine, thank you for listening.

How did Maki do?

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