

DJM [Dynamic Joint Mobility] Training An Interview with Dr. Eric Cobb by Chris Shugart

No way, I thought. There's just no way such simple little movements will accomplish anything.

I was sitting at a seminar in Arizona. The presenter, Dr. Eric Cobb, had just pulled T-Nation contributor Danny John up from the audience. Dan was instructed to perform some overhead lifts and rate how difficult the lift felt. The audience was asked to judge his form.

Between sets, Dr. Cobb's assistant would run Dan through a series of simple, easy looking drills: holding his foot a certain way, performing small movements with his arms and wrists. Then, Dan would lift again. To my surprise, the lift became easier for Dan and his form improved. With each drill and subsequent set, Dan's performance seemed to be improving (and Dan is no slouch when it comes to lifting heavy stuff to begin with!)



It's called Dynamic Joint Mobility or DJM training, the cornerstone of something called *Z-Health*. Many athletes and strength coaches swear by it. Some even call it the missing

link in performance enhancement, saying it can quickly (sometimes instantly) improve strength, speed, and mobility.

I was intrigued. After the seminar I called up Dr. Cobb to pick his brain about DJM and related topics. Here's how our chat went down.



T-Nation: Thanks for the interview, Eric. Let's start with some background. Who the heck are you?

Dr. Eric Cobb: I like to say in my workshops and courses that I was born with two passions in life: fighting and fitness. I started training in martial arts when I was five years old and read my first weight-training book at age seven and I've never stopped — training or reading.

For whatever reason, I'm passionately curious about health, fitness, and maximum performance. As a result, while I make my living teaching, I really consider myself a lifelong student of training. In fact, even with my travel and teaching schedule, I still devote five to ten hours a week to study and research time. As for my education, I have a degree in human biology and am a chiropractic physician. I've done post-grad studies in a variety of areas including kinesiology, musculoskeletal trauma, advanced soft tissues techniques, and other topics.

The truth is, however, that I pursued these areas of study primarily out of a selfish desire to learn more about what made my body tick from an athletic perspective. In other words, I wanted to know more about the body to help myself perform better. Like most athletes, I can be obsessive about improving!

Now, to actually answer your question... I'm the creator and CEO of Z-Health Performance Solutions. Z-Health is a neural training system that fills a very important niche in training that most people are unaware is even missing.

T-Nation: I caught one of your presentations recently and one of the things that struck me was when you said that performance isn't the body's main concern, rather, survival is. What do you mean exactly?

Dr. Cobb: If you take a look at how the body is designed, it was built with certain "priorities" in mind. Our entire reflexive structure from the time we're born is actually based around keeping us alive at all costs. So, in reality, the body isn't about performance at all — it's a survival system, pure and simple.

Most people know that when you're under stress, and your adrenaline is pumping, that all of the body's "inessential systems" are shut down in order to pump up the volume of blood to the musculoskeletal and cardio-respiratory centers of the body — just in case you need to fight or run. This manifests with all of those things we associate with being "scared," such as an elevated heart rate, heavy breathing, butterflies in your stomach, etc. What most people don't know, or more likely have just never stopped to think about, is that this same "survival wiring" is present and operational all of the time, not just in moments of danger. It's just active to a lesser degree.

In other words, when you're having a bad morning at work and had a fight the night before with your girlfriend, although you're not in real "danger" your body will respond as if it is. So you're constantly faced with subtle and not-so-subtle changes in your body as a result of this fact.

T-Nation: Okay, how does this relate to the athlete and gym junkie?

Dr. Cobb: First, by understanding that reflexive, survival activity governs the functioning of the body, and learning how to "manipulate" these reflexes through nervous system re-training, your performance levels can increase exponentially. Many athletes have this nagging intuition that they're never able to reach their true potential. Ignoring the reflexive activity of the body is one of the primary reasons that athletes never "peak."

Secondly, if you ignore all of this and train in such a way that you're constantly invoking "survival" reflexes in your body, your form, posture, joints, and health will all suffer. One of the hallmark survival activities of the body is flexion. In other words, when we're "threatened" we try to get small.

This chronic, low-grade excessive flexion activity in the body will eventually result in a whole host of training injuries as well as lousy posture and poor movement skills — none of which will encourage you to keep training!



T-Nation: Interesting. Now, you also spoke about how the nervous system will shut down to "protect" the athlete. I don't think many athletes and bodybuilders think about the nervous system at all. They think about muscle and that's it.

Dr. Cobb: We're all large bundles of reflexes and your body is far more concerned with making sure that you don't hurt yourself than it is with your performance. At the helm of this "protective" system is your nervous system — it runs the whole show. It's really unfortunate that more athletes don't think about the nervous system while training because it governs *everything* — including muscular hypertrophy!

The easiest way to explain the impact of the nervous system on performance is to use the example of a car. As you drive, you've got two "locomotor" options — the accelerator and the brake. To drive safely, you have to have both. Unfortunately, if you try to drive with both pedals pressed to the floor you're not going to get very far *and* you're going to tear up your car in the process. This is a perfect example of what happens in the body.

T-Nation: So your nervous system is acting as both the accelerator and the brake on your performance?

Dr. Cobb: Exactly. If you're in the middle of a workout and your nervous system believes that you're getting close to tearing a muscle or a joint, it'll shut that area down and you'll have to abandon the lift. That should come as no big surprise to anyone who's done a lot of heavy lifting.

T-Nation: But the body protecting itself from injury is a good thing, right? Why mess with it?

Dr. Cobb: This is the really interesting part. If you have "low-grade" problems in your body, particularly in your joints, your nervous system goes into every exercise with the "brake threshold" set way lower than it needs to be.

In other words, your lifting potential is pre-set at a lower limit than necessary because your nervous system is trying to protect you from injury. Remember, your body is more concerned with survival than performance!

T-Nation: Gotcha. Now, your system revolves around the joints, which seem to be the neglected, red-headed stepchildren in the body. No one thinks about their joints until they hurt. Why should the guy whose joints don't hurt care about them?

Dr. Cobb: It all relates to what I was just talking about. In the nervous system, researchers talk about the arthrokinetic reflex system of the body. Basically, this is a big word to indicate reflexes initiated by joint motion. If you have low-grade or non-painful joint problems, they're still impacting on your performance! In Z-Health our simple rule is that if a joint isn't functioning properly, the muscles that attach to that joint won't function optimally.

From a neurological perspective, trying to train with less than optimal joint function will put the brakes on your performance. It's a survival reflex that's hard-wired into the body. At a base level, your body doesn't care if you can pull a 600-plus pound deadlift today — it wants you healthy enough to try to do it tomorrow.

T-Nation: Okay, let's get down to the nitty-gritty: Dynamic Joint Mobility or DJM training. What is it exactly?

Dr. Cobb: DJM is the foundation of the Z-Health system. It is, in my mind, the missing link for most athletes. DJM training is exactly what it sounds like: a system of joint specific exercises designed to not only improve joint function, but overall body coordination, agility, and control. Done correctly, DJM training can make you stronger, faster, and more flexible and mobile more quickly than you'd believe.

In our system, we also use DJM training to teach athletes about what we call the four elements of efficiency:

Perfect form

Dynamic postural alignment

Synchronized respiration

Balanced tension and relaxation

Here's the critical point: DJM training must be specific and it must hit *every* joint in the human body for maximum benefit. Our bodies are completely integrated systems that are all interdependent, so you have to train the whole body to be mobile and coordinated. Believe it or not, if you look at the body from a basic physics perspective, your joints play a huge role in helping you transfer force efficiently. So doesn't it make sense that we should be training the areas of the body with the most joints if we want to be really strong? But does anyone do it? Just think back to your last session in the gym and try to remember how many people were doing sets for their feet, hands, and spine!



T-Nation: You've mentioned seeing results in strength and power in as little as three minutes with DJM. No kidding?

Dr. Cobb: Absolutely. Pavel Tsatsouline says, "Your muscles are already capable of lifting a car; they just don't know it yet." If you know what to do, you can create

dramatic, near instantaneous changes in the body by showing athletes how to take off their "neural brakes."

The nervous system is an integrated web that runs throughout the body and operates at astonishing speed. This means if I can ask the body the right question through a specific exercise to elicit the positive change I'm looking for, I'll see a result immediately. By the same token, if I ask the body to perform a move that's less than optimal, I'll see the protective mechanisms kick in and shut the body down.

In reality, it's all about having a system that allows you to effectively and quickly deal with the arthrokinetic reflex that I was talking about before. In Z, we use DJM training to do this because we've found it to be more efficient and long-lasting than anything else we've tried.

T-Nation: Can you give us some real world examples with various kinds of athletes?

Dr. Cobb: Sure. One of my favorites is a high school basketball player who put three inches on his vertical with one series of our foot exercises. We get these kind of changes in power and strength all the time with more anaerobic athletes — football players, soccer players, fighters, etc.

As for endurance athletes, we recently helped a world-class middle distance runner shave nearly a full minute off her 5k time in two weeks of training. (We had her doing only one exercise three times a day so it qualifies for the three minute rule!) She subsequently made our World Cross-Country team and placed very highly in competition.

The truth is that we expect these types of changes every time we work with someone, especially if they're new to this form of training. Whenever I or one of my certified trainers work with someone — whether a pro athlete or weekend warrior — we expect very fast results in performance and pain relief.

As I said, if you give the body the right information, it'll respond in a positive direction immediately. This can be seen in either a positive performance change or decreased pain.

T-Nation: Can weekend warriors and just normal, non-competing lifters benefit?

Dr. Cobb: Of course. If this system only worked for elite athletes it wouldn't be of much use.

The reality is the nervous system runs the same basic software and is wired pretty much the same way from body to body. Since our focus is on the nervous system, it doesn't matter if we're working with a 75 year old man or a 15 year old high school athlete, a gym rat or a weekend warrior. All of us have the same potential for tapping into our best performance ever when we focus on the nervous system.

What I normally tell people who are new to Z is to give us ten days of consistent effort. When people do this, particularly people who are already in the gym, two things happen. First, areas of chronic, nagging pain begin to heal and the pain goes away. Second, almost invariably, they hit new PRs. The standard experience is that for the first few days of doing DJM, they have to decrease their training loads about 10% as their

bodies adapt. After this, it's like opening up the floodgates and the personal records start to fall.

The only caveat I give to this is that while trainees of any age will benefit from good DJM training, the rate of change on someone with high mileage will generally be a bit longer. The important thing to remember here is that the body's ability to reach its potential will still be there as long as you give it the right training.

T-Nation: Let's have an example or two, one that maybe the folks reading this can try at home if that's possible.

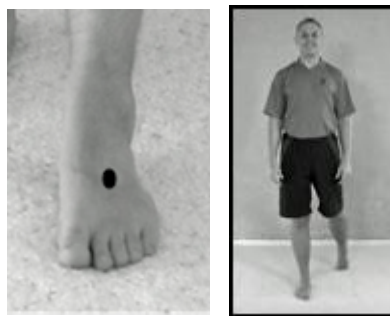
Dr. Cobb: Sure. An example we commonly use is in the shoulder. Because the shoulder requires a virtual symphony of joint and muscular coordination, it's a great place to demonstrate the impact of DJM training.

If you look at the body and how force is transferred, you can think of it as a big X. In other words, the left leg works with the right arm and vice versa. So, to show you that *everything* is interconnected neurologically, here's a quick example.

First, kick off your shoes. Next, grab a heavy dumbbell with your right hand that you can overhead press for two to four reps. Now, warm-up with a couple of singles. Next, while watching your form in the mirror, do another single and rate the RPE (Rate of Perceived Exertion) mentally, on a scale from one to ten. Now, set the 'bell down and perform these two exercises: the middle and outside toe pull on the left foot.

The Middle Toe Pull: Begin in neutral stance, reach your leg behind your body, and curl the toes under with the knee in a neutral position. Use the knee and foot position to create a "stretching" mobilization just below the ankle in the target area pictured.

Once positioned correctly, perform five slow mini-squats (three to five inches) with the front leg. If you're doing this correctly, you should feel a strong stretching sensation in the target area.



Target

Position

The Outside Toe Pull: Begin in neutral stance, reach your leg behind your body, and curl the toes under with the knee in a neutral position. Let your ankle fall to the outside of your body and then use the knee and foot position to create a "stretching" mobilization just below the ankle in the target area pictured.

Once positioned correctly, perform five slow mini-squats with the front leg. Again, if you're doing this correctly, you should feel a strong stretching sensation in the target area.



Target

Position

Once you've done the toe pulls, repeat the press. Again, watch your form in the mirror and rate the RPE. If you have problems in your feet, usually one of two things will happen:

1) The RPE of the lift will become significantly easier because you've stimulated your nervous system and enhanced force transfer through your body. (And yes, I understand that it's hard to believe that the little foot exercises can make that happen, but that's how the body works.)

2) The RPE will go *up*, but the form and technique of the lift will be much better and smoother.

Both results are completely normal and *positive*. In the first, your body's efficiency is going up so the lift is easier and you can handle more weight. In the second, your efficiency is also going up and you're making the lift with better form — which eventually translates into greater safety and efficacy!

The main point of this demo is just to show you that in the body *everything* matters. And, by focusing on your joints, you can come closer to reaching your potential than ever before.

T-Nation: What are the most common things that need to be fixed on the guy who weight trains several times a week?

Dr. Cobb: That's a trade secret, Chris. I could tell you that but then I'd have to kill you. Actually, the truth is that the most common problems for a typical trainee are the same as those we see in the computer programmer, truck driver, and CEO. The main difference is that the guy who's hitting the gym has a body that may be better primed to improve more quickly than someone who's de-conditioned.

You have to remember that the SAID (Specific Adaptation to Imposed Demand) Principle is at work no matter who you are or how you train. Every single activity you perform in your life is training! Your body is adapting to that activity. So every single activity we do is either making us better — fitter and stronger overall and contributing to our performance — or it's hurting us.

As for the most common problems, the feet, hips, and spine are the biggest problem areas without a doubt. We have close to forty different exercises to address these problem spots dependent upon what's wrong. We call these our "high payoff" areas because virtually everyone in our modern society has problems in at least one of these vital joint complexes.



T-Nation: Interesting. Now I'll admit it, I was skeptical when I first heard you speak about this stuff. So, what's the biggest criticism you get and how do you respond to it?

Dr. Cobb: Chris, you just made me a T-Nation fan for life just by asking that question!

Z-Health is so different than what most people are used to that we get lots of questions about it and also a fair share of criticism. I take all of this as a good sign as this is the path to acceptance or the "everybody knows that" position in science. If some parts of our program weren't revolutionary, there would be no criticism because everyone would accept what we say as self-evident.

As for my favorite criticisms... Hmmm, it's so difficult to know where to start! Let me try it this way; I'll give you a few of my favorite criticisms, then I'll give you my favorite smartass answer, then I'll back it up with some science. How's that sound?

T-Nation: Go for it, doc.

Dr. Cobb: Okay, criticism number one: It's too simple to work. Answer: Simple doesn't mean easy and as Josh Henkin and Keats Snideman point out, "Just because it's hard doesn't mean it works."

I've spent virtually my entire life working with and around some of the most dangerous guys on the planet. It took me almost twenty years of being in that environment to understand that the best of the best in every activity are just really, really good at the basics of their craft, whatever that may be.

Criticism number two: Doing DJM training can get boring. Answer: So does your job, but you still show up, right? It's all about perspective. Training can be boring at times, but if you train yourself as a professional, you still show up. Plus, it's my belief that if your workout or training is boring, you're not really engaging yourself mentally in the process. Elite athletes work hard at what they do, both mentally and physically. Everyone can take a page from their notebook and do the same thing. Get your mind involved in every rep and your workouts can become a totally different animal.

Criticism number three: "Cobb is always talking about perfect form and the perfect rep. I just want to work out!"

Answer: Cool. Go for it. It's America and you can do whatever you want. Just understand that every training choice you make costs you something. So, if you want to train with poor form, in bad posture or whatever, you *will* enforce that pattern in your body. This is an indisputable fact. I want people to train for the long haul, not just to look better in six weeks. If you want to look like Clarence Bass at 65, you'd better plan to stay healthy while you're training.



T-Nation: Thanks for the fascinating discussion, doc. Where can T-Nation readers go to learn more about Z-Health?

Dr. Cobb: There are two good options for finding out more about Z-Health. Check out our website: www.zhealth.net or call our toll-free number and talk to us! Our number is 1-888-394-4198.

More specifically, if you're a trainer and would like to know more about implementing Z with your clients, checkout our **certification program** or our **calendar** and look for workshops coming to an area near you.

Thanks very much for your time and interest, T-Nation!

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