

This Exercise Method Can Help You Achieve Peak Performance

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STORY AT-A-GLANCE

- The TB12 Method, named after NFL quarterback Tom Brady, focuses on pliability training
 deep force muscle work that lengthens and softens muscles at the same time those
 muscles are rhythmically contracted and relaxed
- > Pliability is different from flexibility. Flexibility can result from loose ligaments, whereas pliability relates to how your brain connects to your body. It involves a neurological component in which the muscle-brain connection is reeducated and rewired
- As you get into your 50s and 60s, you typically lose about 50% of your pliability. The TB12 pliability program can help reverse some of that loss, and allows you to sustain peak performance well into old age
- > Workouts in the TB12 Method are primarily resistance band-based, since this allows you to activate both accelerating and decelerating muscle groups at the exact same time, which you cannot do with weights
- > Many professional athletes are benefiting from the use of clothing, bedding and wraps with embedded bioceramic powder or far-infrared LEDs

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In this interview, Alex Guerrero, cofounder of TB12 and personal body coach for Tom Brady — one of the best quarterbacks in NFL history — shares the natural and holistic program he developed with Brady, called the TB12 Method. Tom was told at one point

that surgery for one of his injuries was unavoidable. This training method was said to have helped resolve his injury and return to the field, without surgery.

The pair launched "The TB12 Method" mobile app on iOS, and co-wrote a New York
Times best seller book about their philosophy, called "The TB12 Method: How to
Achieve a Lifetime of Sustained Peak Performance." A primary focus of the program is
pliability training — deep force muscle work that lengthens and softens muscles at the
same time those muscles are rhythmically contracted and relaxed.

"I've been practicing this for a little over 20 years now, and when I first started, it was with the idea of just doing some good deep tissue work and helping athletes recover from whatever their injuries were at the time," Guerrero says.

"Some of [my] clients ... would feel better and would go back out and do their training, and then they would hurt themselves again ... It became a pattern, and at some point I thought, 'I really need to see what this mechanism of injury really is. And why are they feeling better but not getting better?'

As I started to ... watch them actually train, I realized that everything they were doing, all their biomechanical movements ... were all learned behavior. The brain was developing more neural pathways as it related to the way they were wanting to move. So, I thought our treatment principles should be based on the same thing.

And if the brain can create neural pathways based on functional movement, then I should be able to do some functional movement during my treatments so that the brain can create more neural pathways for getting better as opposed to just feeling better."

Pliability Training

As he began working on muscle tissues through active ranges of motion, and having the client actively involved in the movement, they not only felt better but actually stopped

reinjuring themselves. That's when he realized that being pliable is different from being flexible.

Pliability actually correlates to how your brain connects to your body. In other words, it involves a neurological component in which the muscle-brain connection is being reeducated and rewired. According to Guerrero, pliability training is a good substitute for a regular warmup and/or cool down. He explains:

"In Tom's case, we will do pliability treatments [on the] lower limbs, calves, hamstrings, quads, hips, hip flexors and his right arm pre-practice. We do that to stimulate the nervous system. We want to activate his nervous system and get it primed and ready to perform its function of running and moving in quick ways, to be able to go out and throw the football 200 times and not be sore in his elbow or shoulder.

We get the nervous system warmed up that way, rather than just doing some long tosses, or throwing or running. My belief is that, if you can actively stimulate the nervous system to do the function you're asking it to perform at the time you need it to perform, it can do that.

You're neural-primed and ready to go do those things. That's our warmup. And then you practice, or do your exercise or whatever you want to do ... and then we ... reset ... [W]e want the brain to understand [it] can go out and do two hours of physical activity and not be sore."

To the outsider, the treatment looks much like a massage, but there are important differences. (There are some muscle groups you can work on yourself, but typically you will need a therapist to perform this treatment on you.) The main difference is your participation in the process. During regular massage, you're basically just lying there, relaxing. To create sustainable pliability, however, you need to perform active movement to engage your brain.

How TB12 Was Developed

Part of the inspiration behind this method goes back to traditional Chinese medicine (TCM), in which Guerrero has a master's degree. TCM is a holistic medicine that takes into account the fact that the physical body, emotional body and spiritual body are interconnected and inseparable. While studying for his master's, Guerrero also went to massage school to get certified in massage therapy. TB12 is a synthesis of those two schools of thought.

"Understanding biomechanics and learning how people move and function, and then creating that mind-body connection, is how I came up with [the TB12 Method] over the course of time," he says. "When I first started ... I would try a technique on [the client] and see how they felt. [They'd] go out and practice, come back, try it again, and see how they felt.

Over the course of some time, I was able to refine it. In sports and athletics, you don't have a lot of time, especially in professional sports ... so, I had to figure out how I could get an athlete's body to change the way it thought about the injury mechanism in a quick amount of time.

Through practice, I was able to change the way the brain thought about how the injury occurred, or even the muscle memory pattern, and I was able to change those over the course of the two- or three-day treatment cycle. I could pretty much take any injury that an athlete had, that was soft tissue related, and get them better in two or three days."

Bioceramics and Other Novel Fitness Aids

I've previously written about the benefits of photobiomodulation, where red or near-infrared light is used to activate mitochondrial recovery mechanisms. Many professional teams, including the U.S. Olympic track team are using it. Guerrero uses it as well, along with fabrics embedded with bioceramic powder that creates infrared in response to body heat.

"We've used far infrared for a long time, and we're continuing to see how we can advance it so it becomes more user friendly," he says. They're already seeing good results with sleepwear embedded with bioceramics, which allows your body to be engulfed in far-infrared for multiple hours each night.

"It has worked out really well and we've done a lot of studies on them. There are certainly a lot of data points on those. Now we've gone from the pajamas to actual bed sheets that we have our athletes and our clients sleep in ... You're creating more ATP production and getting greater blood oxygen levels."

With Pliability, Your Age Becomes Just Another Number

As you get into your 50s and 60s, you typically lose about 50% of your pliability. This is also when many people end up developing disabilities and start losing their range of motion. Guerrero's pliability program can reverse some of that. One of the reasons you lose so much of your pliability is because virtually all movement is learned behavior, and few of us have learned proper body mechanics during our lives. Hence, the older you get, the less muscle pump function you have.

"Let's say you put in an average of 2 million steps a year. If you have a biomechanical asymmetry greater than 5 percent left to right, that load is going somewhere — your soft tissue should take that load, but if it can't take that load over the course of time, your structure takes the load. That's why we're seeing knee replacements and a lot of hip replacements with people that age.

My feeling is that, if you're able to maintain pliability, or even if you get into that 50- or 60-year-old range ... as you increase their ability to have better muscle pump function through these pliability treatments, and get neural-primed and educate your body to support whatever your acts of daily living are, you're able to function much more comfortably.

Our oldest client is 87; his best friend is 85. Their goal was to go ride the Tour de France circuit on their bikes. I thought that was a crazy goal, right? But they

figured it would take them three months and they wanted to go do that. So, we put together a program for them, and they did it. They came back five months later, and not only did they do [the Tour de France], but they also decided to go on a [scuba] diving expedition ...

[A]ging [then] becomes a number, and your only ability to not do something is based on the muscles' ability to support whatever your acts of daily living are. I feel that pliability is the key to being able to accomplish that, [and] you can start to make physiologic change over the course of 14-day cycles. Over two weeks you can start to create new neural pathways for the way that you want to function and move ...

I certainly think you can accomplish whatever your heart sets out to accomplish. That's one of the reasons why we developed our **TB12 Method app**. People can download the app, see what it is they want to accomplish, click on that part of it, and then start their pliability program, their resistant band based program, their eating program — all those things [that will] help them sustain their peak performance."

Why Resistance Bands?

An interesting fact about Brady is that he nearly eliminated the use of weights several years ago. The idea behind that was that heavy lifting should not be done at the expense of pliability. Guerrero explains:

"Again, because everything is learned behavior ... when you do a lot of heavy weights, and you do them slow and controlled, and then you go out on the field and you ask your body to move fast and furious, it's counter [productive]. The body just doesn't neural-prime that way. So, we do weights, we just don't do a lot of really heavy weights.

A majority of our workouts are resistance band-based, primarily because [Tom] is getting older ... [and] we can both do accelerating and decelerating muscle

groups at the exact same time, which you really cannot do with weights ... You can still get 500 pounds of pressure on a resistance band.

So, for example, Tom doesn't do bench presses, but when he has to test for bench press, he can still lift 225 pounds, 18 times. We don't lose any power or strength by doing [resistance bands]. We're just looking to keep our muscles long and lean so that they can be functional for what you're asking them to do every day."

Many of these workouts are included in the TB12 Method mobile app, so you can experiment with them yourself. Another interesting way to adopt the TB12 Method at home is through the use of vibrating rollers and vibrating spheres, which I'd never heard of before. These, too, are used to provide nervous system stimulation and greater blood circulation. Using a vibrating roller will also warm up and relax the muscle far faster than regular foam rolling will.

The vibrating sphere is basically a ball that does the same thing. You can find these items on TB12sports.com. Needless to say, hydration is important, but water alone may not do the trick. You also need to replenish lost electrolytes. Guerrero recommends drinking half of your total body weight in ounces of water each day.

Most athletes, and most people in general, are somewhat dehydrated, and to offset that, especially if you're active, you need to add trace minerals. This will aid the regenerative process. Certain macrominerals, such as sodium, potassium and magnesium, are also important. TB12 Electrolytes, a product which can be found on the TB12 website, contains these along with 72 trace minerals. It's flavorless and contains zero sugar. You simply mix it with water.

The TB12 Method

The TB12 Method is based upon 12 principles. These 12 principles encompass physical fitness, emotional stability and spiritual soundness. Guerrero believes it's important to find a balance between all three.

"I think we do that through the type of workouts we do — through pliability treatments, through cognitive exercises, proper diet and nutrition, hydration, rest and recovery," he says. "Those are all things we feel are very important to be able to tie in those three areas of our physical bodies ... I think a lot of people look at us ... as being different, maybe even controversial, but we certainly don't see it that way.

We really feel like this is something that certainly can be mainstream, and I think over the course of the years that we've been doing this, we're certainly seeing a lot more people take hold of it, understand it, apply it and really feel the benefits of it.

I would say that for people who want to sustain their peak performance, first define what that means to you. You need to then tailor your program so that it is specific to you and your needs, because all of us are different.

We're different shapes, sizes, heights, weights. We move differently, we behave differently, we do things in a different way. So, a one-fits-all type of thing never really made a lot of sense to me ...

Once you're able to define what sustaining peak performance is, I believe that age is just a number. And again, our oldest client is 87, and they're out riding bikes and diving with whales, enjoying the success of what they've accomplished through their life, and that's what I think everybody can have."

More Information

I too am confident you can retain full functionality well into old age, but you do have to work at it. I believe TB12 can be a really valuable aid in that quest. Another one of Guerrero's clients is a 77-year-old woman who runs four marathons a year — and that's how she defines her peak performance.

"I believe our method can help people redefine their lives so that they can go out and do the things they really enjoy doing," he says. To learn more about this program, pick up a copy of "The TB12 Method: How to Achieve a Lifetime of Sustained Peak Performance."

You can also download the TB12 Method app¹ (currently available for iOS only). Last but not least, for those of you who cannot visit Guerrero's facility to get the treatment, there's good news. A certification program is in the works, which will be launched in spring 2018.

If you're an athletic trainer or health care provider interested in becoming a certified TB12 therapist, you can sign up for more information and updates on TB12sports.com. Eventually, the website will also contain a list of certified TB12 body coaches.

Sources and References

¹ Apple.com TB12 Method