



FIT NATION / SOUTHWEST FLORIDA

THE BODY ISSUE

STAY FOCUSED

USEFUL TIPS FOR
KEEPING YOUR
HEAD IN THE GAME

WORK SMARTER + **AND** HARDER

THE NEW RESEARCH THAT SHOWS WHY
WORKING OUT MATTERS

EAT BETTER THIS YEAR

WE SHOW YOU HOW

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MOVES TO
BUILD LONG,
LEAN LEGS

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GOOD VIBRATIONS

Can you really shake yourself fit? FN Investigates. by Dana Leigh Smith

FIT TECH



From the Shake Weight to the Free-Flexor, Americans seem to have a bad case of shake-it-until-you-shape-it syndrome. Which, of course, only has one symptom: believing if you shake something enough, fat will magically melt away. The latest vibration training craze to arrive in Southwest Florida is the Power Plate, a vibrating platform that resembles a giant scale, on which strength and balance exercises are performed. Originally developed in the 1960s for the Soviet space program as an attempt to preserve bone density and muscle mass in astronauts, the machine has been reincarnated and advertised today as a way to intensify workouts.

Product marketers claim that the Power Plate helps aid in everything from weight loss and cellulite reduction to increased strength and power. Skeptics disagree, however, saying that the machine doesn't provide a challenging enough workout to yield noticeable results on its own. So should you shake up your workout or are these new Power Plate studios just giving their customers a shakedown?

WHAT ADVOCATES SAY

Vibration training advocates see the benefits of vibration training as simple science. When you exercise on a vibrating surface, muscles are forced to contract and relax dozens of times each second, increasing the challenge of basic strength training moves like squats and push-ups. The higher the frequency and amplitude of the vibrations, the more intense and efficient the workout is. XLR8 Power Plate Studios, located throughout Southwest Florida, advertises on its website that 20 minutes, twice a week on the Power Plate is all it takes for clients to "get the body they deserve... lose weight and [get in] shape."

The drill-like vibrations may make you feel like you're being shaken up like a martini, but some research backs the claims. A 2012 study published in the *Journal of Electromyography and Kinesiology* found that whole body vibration training increases both lower and upper body muscle activity, providing more burn than traditional training. Some scientists believe that vibration training recruits the hard-to-train fast-twitch muscle fibers, resulting in increased strength and power, too.

WHY OTHERS ARE ON THE FENCE

While it's possible that activating more muscles can increase calorie burn, relying on the Power Plate alone may not be the best way to achieve long term weight loss, develop strength, or improve cardiovascular endurance. Case in point: A 2013 study published in the *Journal*



of Strength and Conditioning Research found that vibration training alone did not cause any significant muscle activity or response during the majority of exercises performed by research participants. Additionally, a 2009 study in the *International Journal of Exercise Science* divided a group of study participants into two groups: one group participated in vibration training and the other group trained with free-weights. At the end of the study, strength was measured using a push-up test. Members of the free-weight group were able to do more push-ups, but the difference was not significant.

"While vibration training does have some benefits if combined with other modes of exercise, solely using the Power Plate for 40 minutes a week cannot compete with 3-5 hours of a traditional exercise or a specialized weight training program," says Andrew Miller, Wellness Specialist at the Dr. John N. Briggs Wellness Center in Naples. "The Power Plate is best used as a supplement to an exercise or training program that also includes traditional strength, cardio and flexibility training."

THE BOTTOM LINE

The Power Plate's value is still unclear and the research is contradictory. While there may be some benefits, more research is clearly needed. In the meantime, if you're interested in getting some good vibrations, use the Power Plate along with traditional exercise methods like weight training, running, yoga and plyometrics. And if you really want to legitimately shed pounds while shakin' it, maybe try Zumba. **FN**

IS THE POWER PLATE THE BEST BET FOR YOUR FITNESS GOAL?

THE GOAL: Increase Muscle Strength

THE BEST BET: Hop on a Power Plate before hitting the weights. Vibration training activates the nervous system, helping exercisers exert more power throughout their subsequent strength training program. Some NFL teams are incorporating Power Plates into strength training warm ups, so why not give it a shot? To activate muscles most efficiently, vibration frequency should be in the range of 30-50Hz; anything less may be too insufficient to elicit any strength improvement.

THE GOAL: Weight Loss

THE BEST BET: A 2009 study in the journal *Maturitas* found that vibration training alone is not an effective way to shed fat. However, when combined with resistance training, vibration training helped to decrease body fat in study participants. Aim for a combination of both training methods along with a smart eating program for optimal results.

THE GOAL: Decrease Lower Back Pain

THE BEST BET: One small study found that people with low-back pain that vibrated twice a week for 12 weeks got relief, but researchers concluded more research was needed. A better method might include aerobic activity, stretching, and strengthening exercises that focus on the back, stomach, and leg muscles to stay strong and flexible, decrease pain and ward off injury.

NOTE: Vibration training may not be for everyone. Check with your doctor before using it, especially if you're pregnant or have any health problems.