Stability Balls, Balance Boards and Core Training: Useful Training or Just another Gimmick

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The number of gimmicks thrust upon us year after year promising to help us build more muscle, lose more fat, increase our energy, improve our health and boost athletic performance is immeasurable. Everyone's got an angle. This will help you to improve this, this will help you improve that, and on and on.

So where does it end? Or more importantly WHEN will it end?

The answer...NEVER! As long as fitness continues to thrive as a multi-billion dollar industry (which it will) there will always be those looking to capitalize and make a quick buck off our desire to look and feel better as well as our ignorance of what truly works and what does not. Others will try to make themselves into celebrities and identifiable to the masses by putting their names to certain training methods or equipment regardless of whether or not these things truly live up to their bold claims and all the pseudo-science behind them.

Every year more and more useless and outright *dangerous* training methods and equipment are presented to us and touted as being "The Next Big Thing". In our haste to get results fast or in some cases, just get results. We blindly jump into the fray not first considering if the supposed science behind the method (or equipment) holds true.

Much of the more useful, productive and proven forms of exercise are considered boring and bland and boring and bland does not sell magazines, books or products. The writers, authors, editors, experts and manufacturers need something to get people excited about. Enter the age of balance boards, stability balls, and my favorite industry buzzword..."Core Training". For those unfamiliar with the term "core training" essentially it relates to the development of strength in lower portion of your torso, i.e. abdominal and low back, which is crucial to spine stabilization and thus the prevention of lower back injuries or pain.

I could sum up philosophies and science behind these things in one word...nonsense! These products and others like them are for the most part useless. I say "for the most part" only because some of them do a have a place, such as in rehab centers or physical therapy when dealing with the severely injured or physically challenged. Those

individuals who are starting almost literally from ground zero in terms of strength and motor coordination, either because of a debilitating accident or some inherent nerve and/or degenerative disorder.

For the entire population of healthy, physically inclined individuals it is a much, much different story. It is a story where these objects, implements and training practices have absolutely no place and are of little benefit if you want to actually achieve some type of significant result in the form of increased muscle mass, functional strength, stability, athletic performance and fat-loss.

The following are three reasons for keeping any of these practices which lay claim to improving the areas mentioned above—out of your routine. Though we could probably come up with at least a dozen more I'll just start with these three as they present a strong enough case for avoiding these objects and training practices altogether.

Reason #1: THEY DO NOT CHALLENGE YOUR BODY IN A WAY THAT WARRANTS AN INCREASE IN MUSCLE MASS OR FUNCTIONAL STRENGTH

When balancing on an object and simultaneously performing some sort of resistance training movement you must DECREASE the amount of weight you could potentially lift because you must put more focus and energy into balancing. This violates the Overload Principle of exercise science, as explained in *PURE PHYSIQUE: "How to Maximize Fat-loss and Muscular Development"*.

To summarize this principle; your muscles and body in general will not grow stronger or larger if you are utilizing loads (weight) that do not effectively challenge their capability and functionality. Performing sub-maximal exercise, whether for a specific muscle group or the body in general, does not provide a sufficient stimulus for adaptation (i.e. increase in muscular size, strength or function).

The argument for performing exercises on a ball or any other unstable object is that more muscle groups are involved thus more overall muscle stimulation is taking place. Though this is true—more muscle groups are active—the extent, to which each is being challenged in a manner that would result in adaptation, is greatly limited.

Not only are the target muscles under less strain because of the decrease in load but the overall stress of the exercise is being dispersed to so many other muscle groups that none receives adequate stimulation. It is like how in a boxing, a fighter can get hit with a hundred or more jabs over the course of the fight. Some will hit the face, others the head, shoulders, or glance off the chin and the damage can add up. But those jabs still

do not have the same physical impact or cause as much damage as getting knocked out with a hard right hook to the head.

As for the muscles of the abdominal and low back—although engaged throughout the exercise—they also are not working at a capacity that would warrant development beyond what could be achieved if trained directly. Performing exercises that directly target and better isolate these muscles will do more to develop your core strength than balancing on any object could ever do.

Reason #2: SKILLS ARE SPECIFIC, as per the S.A.I.D. Principle.

Balancing on an object will help you become better at that particular skill *only*. In no way will it have a positive influence on any unrelated or similar activities you might partake in. This is a known fact and can be found in any Motor Learning text book.

Stability exercises (on balls or boards) are often touted as being essential for improving athletic performance. Specifically, improving the athlete's ability to maintain balance and body control in his/her sport. But how will balancing on a ball help your body control and balance on the ski slopes? It won't! And if balancing on a ball made you a better balanced skier then the opposite would be true. A person good at skiing would automatically be able to balance easily on a ball because they are a good skier.

Look around and you will find countless examples of how being good at one skill, does not guarantee you will be good at another unrelated or slightly similar skill. How many people do you know excel at swinging a golf club but not a baseball bat, or vice versa? If this were the case then every Major League Baseball player would have a career on the PGA Tour after they retire from baseball. How many of them do we see?

How about someone who is good at tennis but not so good at racquetball? Both involve racquets and hitting a ball. You would think that the more closely related two skills are the better you would be at both of them but in fact this is not true. Often times if an athlete tries improving one skill by working at another, it results in what is called negative transfer. The individual actually becomes *worse* at the skill they intended to improve because the intricacies of the two movements/skills play a big role in how well each is executed.

Now does this mean that just because you start working on a stability ball or board you are certain to become adept at other activities? No. But is it helping to improve those other activities? No.

Which then begs the question, if it is not helping you to improve, then why do it? Your time in the gym would be much better served by exercising in a manner that will help

you to develop greater strength or endurance which will improve your performance in other activities.

However, if you are looking for a career in the circus then by all means balance on balls, boards and whatever else you can find. But if you are looking to maximize your physical development, functional ability and athletic performance then steer clear of any of these types of exercise.

Reason #3: INCREASED RISK OF INJURY

Aside from the typical reasons why most of us exercise another that often goes unheralded—but is especially important to athletes—is how proper exercise, and specifically weight training, can help reduce the risk of injury, whether it be from a fall, lifting a heavy object, an abrupt movement, or while playing a sport.

So let me ask you. Do you think balancing on an object while simultaneously lifting a weight increases or decreases the risk of getting an injury *while* you are exercising? There is already inherent risk in performing any type of exercise not just weight training, so what is the point of making an already unstable environment *more* unstable?

Even if all the "supposed" benefits of training in this fashion were true you then have to weigh the 'risk/reward' of exercising this way. Is slightly better balance or improved "functional" ability worth a potentially debilitating injury? How well will you be able to "function" during and after your recovery from an injury brought on by doing a balancing act in the gym? A close examination by any rational human being would conclude that what might be gained through this form of exercise does not compare with what could be lost. The risk/reward, or cost/benefit ratio, of stability (core) training does not lead me to believe that it is a practical training option.

For the athlete, an injury while training could mean the loss of a season. For the bodybuilder, an injury that keeps them out of the gym will result in the loss of hard earned muscle. For the everyday Joe and Jane, it could deliver a severe blow to their lifestyle and affect their everyday activities.

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Without question, year after year we will continue to be presented with more gimmicks and "cutting edge" training techniques. Without question most, if not all of it, won't be worth a penny. Unfortunately people are going to buy into it regardless and will have wasted their money and gained little or nothing in return.

I do not want you to be one of those people. If all the benefits being promised to you seem too good to be true...they probably are! Learn how to properly apply the proven strategies for physical development like those presented in *PURE PHYSIQUE: "How to Maximize Fat-loss and Muscular Development"* and start getting a real return on your exercise investment.