TRX TRAINING AND CURRENT EXERCISE SCIENCE

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At Iron & Grace we believe in using evidence based methods to achieve optimum results for all our clients. As a presenter and educator for STOTT PILATES®, I learned early on the benefit of core stability and mobility and the value of good communication and imagery to get the desired movement results. Appropriate exercise design for the core cannot be achieved with pamphlets showing suggested exercises, a good coach is important. Some people need more stability while others may need more mobility and programming and coaching can assure the best movement. While the TRX suspension trainer is a wonderful tool to teach you "ALL CORE , ALL THE TIME,® it also supports safe dynamic flexibility. Considering the concept of dynamic flexibility and myofascial strength and flexibility is a commonly used best practice among conscientious fitness professionals and clinicians and the TRX and Rip Trainer allow for programming to most profoundly affect optimal movement.

ALL CORE ALL THE TIME

It is widely believed that stretching the back, and increasing the range of motion is beneficial, and reduces back problems, however the scientific evidence shows that, those who have segmental hypermobility or are overbraced in their spine have a greater risk of injury. As an example, we see many low back and shoulder injuries that have come about because of a lack of thoracic mobility. Clearly there is a tradeoff between mobility and stability where the optimal balance is a very personal and individual variable. Indeed, the *stability/mobility balance* may shift during a progressive exercise program as symptoms resolve, or with advancing age, or as training objectives change.

This brings me to the point of a stable versus an unstable (in this case the labile strap of the TRX) environment and the effectiveness on core activation. In a recent study in the Journal of Strength and Conditioning Research, researchers sought to find out the effects of using TRX suspension training straps in pushing exercises. The researchers were looking at more than just muscle activation. They were also interested in the effect of each method on spine loading and how coaching affected the outcomes.

The research team included Dr. Stuart McGill, who is well known for his work in the field of biomechanics and kinesiology specializing in low back health/spinal stability. The researchers compared pressing exercises done with the TRX to more traditional versions of the exercises. For simplicity's sake I will present the results of the traditional pushup on the ground with the TRX chest press as it relates to core activation.

When it came to the upper body muscle groups there were mixed results but the important variable was the coaching. The TRX press had the greatest impact on core musculature in general. They found proper coaching was effective at keeping the spine safe in the TRX exercises.

DYNAMIC FLEXIBILITY

Lack of flexibility is the most prominent precursor to injury. Most people do not suffer injury while staying still, but they often injure themselves when they are moving through a range of motion abrubtly; where their body does not have flexibility to sustain the movement. Dynamic stretching involves using a muscle's own force production along with the body's momentum to take a joint through its full range of motion. The TRX suspension Trainer has the ability to both support movement and minimize load through your position, giving us the opportunity to maximize your safest and most effective ROM.

MYOFASCIAL FITNESS

The research on myofascial health has been prolific in the past decade and the findings have had a profound impact on conscientious, functional training based exercise professionals like the trainers at Iron & Grace. Fascia forms a whole-body, continuous three-dimensional matrix of structural support around our organs, muscles, joints, bones and nerve fibers. This multidirectional, multidimensional fascial arrangement also allows us to move in multiple directions- tensegrity. I will focus on myofascia, the connective tissue surrounding and living among our muscular structure. Training myofascial lines with whole-body exercises has unique benefits. It dissipates force throughout the entire system, minimizing excessive isolated joint tension while giving our joints freedom to move in all three planes of motion and improving total-body awareness and coordination. The TRX allows us to create passive extensibility through myofascial lines and enhance joint stability and easily work in 3 dimensions.

The results speak for themselves. At Boonsboro Country Club, we may be using the TRX and Rip Trainer as our prominent tools, but the exercise programming you will experience pulls from our collective knowledge of exercise science. We coach our knowledge. Whether it is the Russian kettlebell, the specialized Pilates equipment or the simplicity of breath and movement from a yoga practice, we are always putting current research and best practices to work. We are scientists, practicing the art of movement and delivering it practically and look forward to seeing YOU in the tennis center for class!

TRX Fitness Anywhere