

**The core is your FOUNDATION as an athlete.** Your “core” gives your body an “anchor” for your arms and legs so they can do their thing – which is to generate force, speed, power – regardless of your sport or activity.

Not only that, but your core also helps absorb and resist the forces that are acting on it as you run or do any other physical activity. **When functioning well, the *integration* and *support* it provides allow for the efficient transfer of energy through your body.**

That one single paragraph is profound and worth reading a few times over, trust me. If you understand what it means and apply this in all of the training you’ll do, it will make a huge difference in your success.

**Since the core is our foundation...what then is the real purpose of core training?**



You may think of the core as isolated abdominal muscles such as obliques or the rectus abs that make up that infamous “6-pack” so many people long for.

But your core isn’t just the rectus abs. It’s far more than a few superficial muscles on the front or side of your body. In fact, *at the very least* your core is **the ENTIRE trunk from your hips and pelvis to your neck and cervical spine.**

Regardless of how you define it, the point I want to share with you right now is that the “core” provides for *integration* and a *foundation* for everything we do in all our sporting movements. And in our daily lives.

Coincidentally, as I was writing this up for the website, I received an email from an athlete I just started coaching a few weeks ago. He came to me with a chronic calf injury from running and was really frustrated. Luckily for him and for me, he was willing to go back to the beginning to learn and practice the same skills you will be exposed to in this program. In an email to me today, here's what he said:

"I can really feel a difference doing just day to day tasks which is an unexpected reward from this. I find engaging the core makes a big difference. Even squatting to put the leash on the dog is easier." – Mark Horn

***From my point of view as the coach, this is what it's all about.*** I don't just wish for you that you'll become the runner or athlete you always dreamed of – I also wish for you that all of your daily activities are easier and that you feel better, every day. That's my focus – to help you become a *better* human being.

So, let's keep going, OK? 😊

**So, again, what IS the primary function of the core, and of core training?**

Here's the answer to this question. Let this sink in a little bit because it is THE KEY to understanding the training you'll be doing moving forward.

**The primary function of this *foundation* (your core) is to STOP or control motion.**

**It is NOT to create it.**

**It does that by way of stability first, and strength second.**

In fact, the definition of *stability* in athletics is to ***stop or control motion in one area of the body in the presence of motion somewhere else in the body.*** For our purposes right now, we're talking about the pelvic girdle for example – the theoretical center of our body – and of course *the swinging arms and legs of a runner.*

Stop and think about that concept for a moment because it's extremely important as to WHY you would want to train the core, and most importantly, HOW you should do it.

Let me repeat: **The core's primary function is to STOP or control motion, NOT create it.**

Think about more traditional “ab” exercises like sit-ups and crunches. Consider again the actual role your core (which is your foundation) plays in how efficiently and effectively you move. As you do, you'll quickly conclude that **traditional sit-ups and crunches are some rather DUMB exercises**. Why? Well, while that may sound harsh, when these exercises are done in the traditional way they *initiate motion of the core rather than train it to STOP motion*, which is its true function.

Think about it.

Your core works *reactively and synergistically* with every other part of your body to make sure that when you're running, cycling, or swimming, the only parts of your body that are moving are the parts that are *supposed* to be moving, which for the most part are obviously your arms, legs, and hips! Similarly, it helps ensure that the largest prime-mover muscles like your glutes, quads, hamstrings and lats are exclusively performing what is their primary role – moving you!

### **Let's dig into the details: Your core *must* be stable**

I've tossed around the word stability a few times and provided a solid definition as it relates to the core, right? Just to quickly review, **the core's primary function is to STOP or control motion, NOT create it.**

The next and most important concept then, is to understand that the **first (and primary) goal of the core training you do is to create STABILITY.**

### **Creating stability: Why does this matter?**

Think of it this way: your core is the anchor for how you transfer power to your arms and legs, while making sure that each body part does ITS job only, and not the job of any other part. That's a critically important concept, because *compensation* (one body part compensating for another, or trying to do another part's job) is what **always leads to injury.**

Just like the sailboat vs. concrete building analogy in the video you watched earlier, stability is about tying everything together in a balanced way, making sure everything is working synergistically and symbiotically. It's very much akin to a large group of rowers all in a boat *pulling as one single unit or person*, to get the boat across the water more quickly and efficiently.

Without this *stability* in the trunk and into the pelvis, your big prime mover muscles like the glutes, quads, hamstrings, and lats can't function as they should to help you move forward and generate power and speed, or give you a much larger margin of error when it comes to durability.

The more stable your core – the more all of the smaller AND larger muscles and connective tissue **work together as a synchronous integrated unit**, the more **power you can generate** with your extremities.

**Core stability allows your entire kinetic chain to work at optimal efficiency and is the ultimate secret weapon for generating more power and more speed!**

...just like a perfectly functioning sailboat where every rope (and the sails attached to them) have just the right amount of tension and freedom of motion to do their thing as efficiently and effectively as possible.

So, taking this a step further: as you swim, bike, or run, **moving as authentically as you are able with a stable and strong core becomes the fundamental basis for YOUR ultimate performance potential.**

*All your hopes, dreams, and goals for training and racing start with a stable and strong core.*

**We good so far? Great, let's take these concepts to the next level by introducing this term: Reactive stabilization.**

**Let's dig into the details: What is it and why should you care?**

The core functions to reactively stabilize during every dynamic movement we do. In other words, the core kicks in to *prevent inefficient motion* in the presence of motion elsewhere in the body.

Think again about what we discussed earlier. We don't train our core by "creating" motion. The core as we're thinking of it doesn't create motion. Its goal is to stop or control motion, hence the term "reactively stabilize."

For example, as a runner swings his or her arms and legs, a properly-functioning core *reacts to stabilize the spine, pelvis, and shoulders* and allow for the transfer of power to the legs. The same is true for pedaling a bike or pulling and kicking if you're a swimmer.

This *reactive stability*, coupled with proper *mobility of our joints, muscular balance, and overall strength*, allows for the optimal functioning of your big prime movers like the glutes, quads, etc. The supporting stabilizing muscles can then go to work to keep good biomechanical form over long distances and make sure the joints are moving as they need to be.

**Reactive stabilization is very close to the silver bullet athletes are constantly searching for.** Employing a stable core is how your true athleticism emerges as you stop wasting energy and transfer EFFORT from your sport-specific movement into SPEED throughout your training and racing.

**Do you "front" plank and believe you have a strong core?**

**Believe it or not, it may still be a weak or unstable core!**

Let me say it straight out: the 4-point front plank is one of the dumber exercises out there, IF YOUR GOAL is to improve your durability, speed and power. (It's not as dumb as a burpee however!) 😊

Regardless of how long you might be able to front plank or how well "developed" your abs are, IF your core IS UNSTABLE, there is no doubt you are **at higher risk of injury** AND you're **leaking speed**.

The instability is guaranteed to lead to some degree of compensation in your body and throughout nearly every movement depending on how dynamic it is. Thus, your body is forced to utilize less than optimal muscle action to power your way through training and racing. Your risk of injury is MUCH higher.

## Working the “Abs”



Many athletes have been led to believe they are enhancing their training by doing an exercise like sit-ups and crunches. Many popular “cult” training programs that are thought to be “cutting edge” and cool include these kinds of exercises.

**Core stability has no relationship whatsoever to training abdominal muscles in isolation.** Exercises like these allow motion to occur through the

lumbar spine, negating, as I explained earlier, the functional purpose of that area of the body.

The lumbar spine is not meant to *greatly* twist and flex, and the discs in the back are harmed by those movements. Sit-ups and crunches and the like are completely counterproductive to your goal of becoming a better runner or triathlete.

### **Is there a difference between core “stability” and core “strength”?**

The simple answer is **yes**. And the difference, which many athletes and coaches confuse or simply may not quite fully understand, is critical for determining how you’re going to approach your training, or whether the training you do will help you improve. **After all, lots of athletes “do” core training the wrong way and end up not benefiting at all from their investment of time and energy.**

**And that sucks.**

**So, what are the differences?**

- **Stability**, sometimes referred to as *motor control* in some clinical and training circles, is *neurological*. It's in the brain and within the joints themselves. **Training stability is essentially “brain training.”**
- **Strength** is simply the ability for muscle and connective tissue (or tissues) to generate force. While strength begins at the level of your nervous system (think of it as simple coordination first), it's primarily about “muscle adaptation and growth.” Training strength means forcing recruitment of increasing numbers of motor units within muscle tissue, forcing the body to adapt and get stronger due to increased demands on the tissue.



We create stability in our “core” from one shoulder to the opposite hip. The term often used to describe this is the “Serape Effect.” Think of it this way: as was stated earlier, **your core is your anchor for the arms and legs.** The stiffness and integration from your core as your anchor or foundation, that develops properly from appropriate training, comes from the diagonal (and spiral) orientation of the tissues from one hip to the opposite shoulder.

This *Serape Effect* is the basis for the hip power that helps you run strong and pedal strong. It all begins when we are infants, learning that basic cross-crawl coordination that allows us to first roll, then crawl, and finally walk.

## Two things that make all the difference

When you understand this concept (that *stability is neurological – it's in your brain and within the joints*), and that all core stability training is first and foremost, **brain and joint training**, then you can easily see when doing some “core” training, how important these two things might be:

**1. You need to start at the beginning.** *You need to master the first steps, first.* Then you're ready to move on and progress to something more challenging. (You wouldn't attempt calculus before you mastered arithmetic, would you?)

**2. You should perform each phase of any of the movements we'll do as "perfectly" as you can.** Think of it this way: to change behavior (in this case, your stability), you must change the neural engram or existing patterning in the brain.

You need a little movement "amnesia" and "re-programming." That can only happen successfully when the new, more desirable pattern is performed *as well as it can be*, at a level that is attainable.

Let me say it again: that can only happen successfully when the new, more desirable pattern is performed as well as it can be, at a level that is attainable. I think it was the legendary coach of the Green Bay Packers, Vince Lombardi, who said, and I quote: "Practice doesn't make perfect, perfect practice makes perfect."

**Here's one more very important concept to understand:**

The "quality" of the patterns you will practice and develop WILL BE the direct result of the quality of your joint articulation and range of motion. **Poor joint range of motion = poor patterns.**

Think of it this way: your joints such as the hips, shoulders, and spine, are the **tools** you will use to build the **patterns** that will create the durability and strength you desire.

Take this simple but incredibly important concept and apply it in this training. When you get to each of the circuits in this program, I have included one movement in each circuit that will help you improve joint articulation at the joint level. These **Controlled Articular Rotations** come directly out of the work I do as a *Functional Range Conditioning Mobility Specialist*.

Trust me when I say, nothing is more important than having the best tools you can for the job at hand. In the case of our body and athletic performance, it is about the joints first and foremost!

**What's the primary purpose of all this information?**



**Simply put, it is to empower you to explode your potential!**

I believe it's very powerful when you truly understand **THE WHY** behind **the what** – to know why you're doing what you're doing, you know? You're guaranteed to bring more passion, energy and enthusiasm into your training when you understand the philosophy and you embrace it fully. That's the simple reason why I shared the above information with you.

That being said, do you need to understand every single tidbit or nuance of the science right now, to progress successfully? Absolutely not. You can jump right in with Circuit 1 and get to work.

Regardless of how you want to define it or what words you want to use, there's an almost irrefutable truth and training principle that succinctly expresses the WHY behind this exercise and this type of smart training:

**To avoid injury and generate speed and power, our *entire* body needs to function as a *single integrated unit*. Head to toe, top to bottom, inside and out, all working together in synchronous motion, with every part of your body handling only its responsibilities and nothing else.**

When you learn how to *stabilize the core so that it can take care of itself*, and then integrate (e.g. connect) your upper and lower halves during the exercises you do, you'll improve your durability AND reduce energy leaks.

Bottom line, you're going to love how it feels and how you perform!

And in this context, isn't that what really matters? I'd say so! Onward and upward my friend, let's get to work!