

The first thing I would like to mention before I begin is how are those New Year Resolutions that you made, in particular, to exercise more, going? Remember, set mini goals which prove to be more successful!

Now on this month's article. No one believed me that summer would start in May...we were destined after three years of waiting until July for it begin. I know many of you plunged into outdoor activities and made up for last year's 39 days of frost to frost. That being said, how is your upper body strength and especially core. Even though we have, I would predict, about a month and a half before outdoor activities become too much of a fight with weather, the next outdoor sport activity should be on your mind. Yes, ski performance fitness. As a business owner, believe it or not, our ski performance classes are already since the beginning of summer. The reason being that as a community, we have more than made up for our lack of summer in past years with much outdoor fun. Thus, dominate overuse leg activities, little stretching and a weakened core sets in to the majority.

If you have ever read any T2BB article, you will know and understand that I always try to slip some form of "core concept" within each article topic. To get back to why ski performance is already set; when we begin the ski performance group training, we prep everyone's core and open the hips in order to prepare for proper conditioning and skill readiness for skiing and snowboarding.

Stuart McGill, a professor of spine biomechanics at the University of Waterloo, has recently written a book that has given a different approach regarding the core and core training. He has also written an article that explains evidence translating to better performance and injury prevention. I have taken excerpts from the article below.

"The core is composed of the lumbar spine, the muscles of the abdominal wall, the back extensors, and quadratus lumborum. Also, included are the multipoint muscles, namely, latissimus dorsi and psoas that pass through the core linking it to the pelvis, legs, shoulders and arms. The gluteal (butt) muscles may also be considered to be essential components as primary power generators."

"The core musculature functions differently than the limb musculature in that core muscles often co contract, stiffening the torso such that all muscles become synergists."

At T2BB, we encourage the concept of engagement to the core muscle groups to not bend or twist when we indulge in Jackson activities. When the core is not loose when engaging in a steep uphill bike ride climb, when hiking down from Surprise Lake, or every paddle pull or rowing in water sports (even though it is twisted, it stiffens during the action), pillar strength is created. This is created by stiffening the core, which allows for better movement through the limbs to do their action.

"Evidence and common practice are not always consistent in the training community. For example, some believe that repeated spine flexion (crunches) is a good method to train the flexors, also known as the rectus abdominis and the abdominal wall. Interestingly, these muscles are rarely used in this way because they are more often used to brace while stopping motion. Thus, they more often act as stabilizers than flexors. Furthermore, repeated bending of the spinal discs is a potent injury mechanism. Another example is misdirected practice commonly occurs when (participants) pull in their abdominals to 'activate their transverse abdominis' to enhance stability. First, this does not target the major stabilizers of the spine because studies that measure stability show that the most important stabilizers are task specific."

"The core, more often than not, functions to prevent motion rather than initiating it, which is contrary to the approaches that many trainers employ in designing exercise for their clients. Good technique in most sporting, and daily living tasks demand that power be generated at the hips and transmitted through a stiffened core. Pushing, pulling, lifting, carrying, and torsional exertions are enhanced using this basic technique of hip power generation but are compromised when the spine bends causing what is often referred to as 'energy leaks'. Interestingly, these task classifications greatly assist the organization of program design (think of building exercises to fulfill a push, pull, lift, carry, and a torsional buttressing task rather than specific isolationist exercisers for the abdominals, back extensors, latissimus dorsi, and the like)."

I am not advocating the fact that bending is bad to build pillar core strength, however, the old ways of crunches and the feeling of that “burn” in the mid section is truly an ancient art. Side planks, planks on a stability ball, bird dog extension (on hands and knees and extend opposite foot and hand in opposite directions), carrying a weight during lunging or heavy loads on only one side of the body are examples of types of exercise that are current and supportive for the core to stiffen and help other parts of the body to excel in all movement.

Another thing I find helpful is the Lateral Cable Hold. Stand with a cable to the side of your body or perpendicular to a cable pulley; step away from the pulley with a hand out in front of you; hold the position and move hands close to the core and away from body.

Remember, while still playing outside, do a few exercises that will increase the strength of your core before ski performance begins. Maintenance is important for not only during the summer activities but easily increases when the next seasonal sports comes about.