

Summer is upon us, snow still in the mountains and everyone is outside soaking up long light days, enduring tourist traffic and being active. I want to touch on three topics, DAMP (also known as warm up), running (walking can apply as well) and mountain biking (cycling does apply). I wish I had more room within this article to write about paddling, rock climbing and even motocross however the former is the majority is what we see in our members and email questions.

DAMP stands for *dynamic activation movement prep* and it is taken for granted, skipped or forgotten in many participants' workout routines or outdoor activities. It is like skipping the most important meal of the day – breakfast. DAMP ensures you turn 'on' the appropriate muscles in preparation for the activity you are about to embark.

Activation is a strategy that enhances the excitability of the neuromuscular and muscle sequencing. Sequencing is synonymous with synergy in that muscles and nerves work in a kinetic chain to produce the maximal amount of force or movement pattern. Proper activation increases range of motion and prepares the body to handle acceleration and deceleration forces.

For example: Standing Scorpions - stand with arms out to side in a T and reach one flexed foot back, up and behind body (like a scorpion whipping its tail). The heel is moving towards the opposite hand from behind. Avoid moving the upper body too far forward. Another example is the Cross Side Step Lunge (insert picture) - stand and step one foot in front of the other and sink hips with legs crossed (one knee crosses the other) then drive hips down. Slightly rotate hips (not shoulders) in the crossed direction and feel it on the outside of the hips/glutes.

Pick large range of motion movements that can done quick at the trailhead or at the exit of your car door. All you need is a few minutes to prepare the body for motion...think long term health benefits!

Running. It is probably the most natural form of exercise due to its simplicity, low cost, and accessibility. Because of its simplicity, it does not mean everyone should do it. Running form is important and commonly leads to other issues such as shin splits, low back pain, patella/knee pain, hip impingement, IT Band syndrome (which in my opinion does exist but that is for another article), ...the list goes on. However, it does not matter what I write, most will continue because he/she has been doing it for years or running helps the mind shut off. Thus, I will expand on the basic knowledge that can be expressed through this article.

Five points to consider while running. First, stay tall, upright and engage the core (upper/lower back, abs, oblique's, and glutes). Second, slightly lean forward. Careful with this, avoid leaning forward at the waist. Lean forward onto the balls of the feet as if you were looking over the edge of a cliff. Third, land on your mid foot, not on the heels or toes. Fourth, allow your wrist cross your body midline. Do not mix this with rotation of the upper body; rather drive arms forward and back with the wrist crossing midline. Fifth, begin these points on a one to one ratio for time. For example, one minute the way your use to running and one minute using the above points. This allows the body to adapt efficiently.

These points will aid in faster running speed, foot/ground economy and eventually longer runs.

Biking. Your body requires core stability in everything but more importantly, in biking. The more your core can hold its self up the more your legs can do their own job. Removing your bike from the top rack is core stability. Hopping on your foot over your bike onto the pedals is core stability! Pedaling up hill and riding down is core stability!

To augment this idea, *James Wilson*, Strength and Conditioning Coach for World Cup Mountain Biking Teams offers some core advise. He addresses the core through a video "...mountain biking along with exercise ensures you are properly executing the movement." Check it out at <http://www.pinkbike.com/news/4-Core-Exercises-2012.html>. The below is a brief insert of core training:

“Being able to create movement around a solid core and resist twisting and bending is what we need as mountain bikers...”

His lists some examples that I recommend you attempt.

“Sandbag: High Plank or Push Up with Lateral Pull - This exercise has you either holding a High Plank or performing a Push Up and then pulling a sandbag laterally across the floor under your chest. This exercise is great for teaching you how to resist rotation through the hips which is important for stronger, more efficient pedaling.

Kettlebell: Half Kneeling Halos - This exercise has you get down on one knee holding a kettlebell "bottoms up" and then bringing the kettlebell around your head and back to the starting position in front of your chest. This exercise is great for teaching us how to balance and stay strong in a modified split stance position, which is important for building stability when standing up in the attack position on the bike with either foot forward, i.e. being able to ride switch foot effectively.”

What ever it is you do outside this summer, remember to DAMP before every activity, maintain form, and always, always, work your core to supplement longer lasting outdoor fun!