



Peak Bodywork's

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It is great to be back in the office! And to introduce Massage Cupping

Thank you for all the well wishes and positive healing thoughts this summer following my shoulder surgery and rehab. I am happy to say that the surgery went very well and I am back in the office with a new appreciation and understanding of the needs of the post-surgical patient.

I took advantage of my time out the office to catch up on my clinical reading, participate in a continuing education class to learn massage cupping and to spend more time training at the gym.

I had the opportunity to train at Mtn. Athlete coaching some fantastically motivated individuals. Being around so much energy helped keep me motivated during many (boring) hours

on the stationary bike and painful physical therapy sessions.



Now that I am back in the office doing massage and manual therapy, I am very excited to incorporate a new modality to my practice; Massage Cupping.

Massage Cupping is similar to the cupping you may have received during acupuncture treatments. Plastic or glass cups, are applied to the body with vacuum suction to normalize muscle tone, loosen adhesions by lifting connective tissue, and encourage the opening of the lymphatic vessels to drain and remove inflammation and toxins from surrounding tissue.

Stationary cups are most

frequently used in Traditional Chinese Medicine to open energy channels and dispel internal heat. Cups can be applied over trigger points and scar tissue to facilitate softening of these stagnant tissues. A stationary

cup can be applied up to several minutes depending on the intent of the treatment. Stationary cups can cause discoloration in the skin as circulation is drawn into the capillaries of the skin. This discoloration in circular patterns dissipates within a few days following a treatment. Arnica can be applied for the first 72 hours following a treatment should skin discoloration occur.

Flash cupping is another technique used, where "rounds" of cups are applied over a larger section of the body. Such as the full length of a muscle to encourage circulation through the muscle and to normalize chronically

over- or under-active muscle tone. "Popping" a cup over dense fibrotic tissue can be quite stimulating to underactive massages and can encourage the release of adhered or stuck tissue.

The third technique involves moving a cup in a massage like fashion. Before applying the cup, massage oil or lotion is applied to the skin to facilitate smooth frictionless movement of the cup.

Massage Cupping can be used in conjunction with myofascial release and sports and orthopedic massage sessions. Massage cupping creates "negative pressure" where as manual massage creates "positive pressure" to facilitate changes in the muscles, tendons and fascia. The negative pressure of massage cupping is effective for lifting and separating layers of tissues that have become adhered such as in the IT band, plantar fascia and post surgical scarring while simultaneously decompressing lymph and blood vessels that have become constricted due to tissue tension and scarring.

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5 Exercises to Improve Running Mechanics, *an excerpt*

The following is an excerpt from an article on Running Mechanics by Jesse Kropelnicki of QT2 Systems. This fantastic article introduces the common faults that hold runners back. With the availability of video these days take a quick minute to video yourself running. You only need to capture a few steps to look for these 5 key components to your running form. Check out www.youtube.com/watch?v=27QgZYgHBcl for a running mechanics analysis if you liked this article.



bility, which greatly improves femur extension.

Poor Hip Extension This is measured by how far behind the body your leg (i.e. femur) extends during the recovery phase of your running stride. I typically like to see a minimum of 16 degrees of femur extension off of the vertical.

This quality is critical in good running posture, because it typically leads to a higher running cadence. By extending the femur further behind the body, your lower leg tends to recover much higher and closer to your rear-end. With this higher recovery, the lever created from your hip, down has less rotational mass and is therefore in a position to recover forward, faster. This faster forward recovery leads to a higher running cadence and, most times, a better strike location relative to your upper torso position.

A higher running cadence helps reduce fatigue, increase speed, and reduce the possibility of injury. It's not as simple, however, as heading out the door and thinking about the need to run with a faster cadence. This approach typically leads to hip flexor injuries due to an increased load on the hip flexors.

The key to a proper increase in running cadence is good upper torso position and hip flexor flexi-

Upper Torso Position This is the position of your body from your waist to your ear, relative to the vertical position. Ideally, I like to see the upper torso at a forward angle of about five to ten degrees off of vertical. Proper upper torso position helps improve running cadence and sets your body up for a foot strike that falls beneath the body. This improved foot strike position reduces braking forces and vertical bounce.

Extreme vertical bounce in a runner's gait leads to slower than necessary run times, as the balance of time moving vertically is NOT spent moving horizontally. This extreme vertical bounce can also overload the hips in, most cases upon contact with the ground. An additional one to two inches of vertical bounce, beyond normal, can relate to as much as 300 to 600 feet of vertical climbing in a flat 40-minute 10K, running at 90 steps per minute. This vertical bounce essentially creates hills where there are none!

A good upper torso position also permits the upper quad and psoas a bit of "slack", allowing for good extension, as discussed above. While creating a good upper torso position is very much cognitive in nature, it also requires good soleus (calf muscle) flexibility. Many

triathletes lack this flexibility, leading to poor running mechanics, and many times, Achilles tendonitis and/or plantar fasciitis.

So far, we have discussed two flexibilities that are critical to good running mechanics: soleus flexibility and hip flexor/upper quad flexibility. These are the very same areas that become very tight with frequent riding in the aero position. Therefore, it is with no surprise that we see so many poor running strides on the marathon course of any Ironman.

Hip Drop This is best evaluated through video run analysis, and is presented by the dropping of one or both of the hips, upon foot strike and weight transfer.

Drawing a horizontal line across the very tops of the hip bones, a drop of more than 14 degrees can be indicative of weak gluteus media and/or TFLs (tensor fascia lata). A good video analysis will very easily identify too much hip drop and the effects that it has on your running stride.

From behind, this hip drop can be seen as a zig-zag pattern that starts at the feet, extending up through the hips, back and head. Upon the striking and dropping of the hip, we essentially see all of these body parts going in different lateral directions. The legs and hips end up leaning in different directions. The back follows the legs, and the head follows the hips. Hence, the zig-zag effect!

This is a major chain-reaction of lateral deflection being directed in opposing directions. For example, with a weak left gluteus medius the right hip drops and the left hip

leans to the left, causing the legs and back to actually lean to the right. And, in a last ditch effort to keep the body from falling over, the head goes the way of the hip, leaning to the left. All of this, when our aim is to run neither left nor right, but forward!

This hip drop leads to unnecessary usage of muscle glycogen at a time when we are doing our best to preserve it. Furthermore, the hip drop also tends to contribute to a lower running cadence, because more time is spent in contact with the ground, upon foot strike and rebound. The more energy that can be put into moving forward, rather than left, right, up, or down, the faster you will be.

Lack of Shoulder Rotation The shoulders play an integral role in efficient running posture. Many athletes are under the false impression that they should be running with a very square shoulder position. In fact, it is just the opposite as the best runners actually use their shoulder mass as a tool to help propel them forward, late in races when their lower bodies becomes extremely fatigued.

A lack of shoulder rotation tends to be cognitive in nature and/or related to a weakness in rotational core strength. A strong upper torso rotation, late in the run, requires a great deal of rotational core strength, as the athlete is relying solely on the soft-tissue strength of their core to facilitate the rotation.

Dropped Arm Position Both dropped arm and "elbows out" positions are typically the result of hip weakness and/or cognitive habit. Typically, runners with weak hips on one or both sides tend to drop their arm on the side of the weak hip, in an effort to pull the body back over to that side.

This is one of those inefficient compensatory motions that slow runners down. These arm positions tend to limit cadence as more rotational mass is presented in the form of arm mass further away from the shoulder.

Most world-class runners exhibit the same acute elbow angle deep into their recovery posture, as they maintain during the drive portion of their arm swing. It is as if the elbow is being pulled directly back from its most forward position with a fishing line!

Compensation for any of the above identified deficiencies fall into two different categories, namely cognitive and muscular. Those cognitive in nature require the runner to make mental changes to their posture while running. The recommended muscular changes can be addressed in strength and flexibility conditioning.

The Exercises

These exercises are those that I most commonly prescribe to athletes, following a detailed running mechanics assessment. Each of these directly impact one or more of the above critical areas, required for great running mechanics.

1) Single Leg Squat: This is the single most commonly prescribed functional strength move that I use with the athletes who I assess. They can be done with a TRX, standing alone in your living room or in the gym on a smith machine. In each of these cases, the eccentric loading that must be resisted by your hips helps to eliminate hip drops through strengthening of the glute medius



and TFL, among other muscle groups.

How: Stand on one foot and lower yourself down to a comfortable depth without straining your knee, then raise yourself back up. Try this without holding onto anything to get a significant balance benefit out of it. Do three sets of 10 reps.

2) Eccentric Calf Raises: This is the second most commonly prescribed run-specific strength/flexibility move that I prescribe. It helps to create a better forward upper torso position, leading to a higher running cadence and much reduced braking force. This move



also practically eliminates below the knee soft tissue injuries.

How: Stand on a step with just the ball of your foot (preferably barefoot). Start on the toes of one foot and very slowly lower yourself down until your heel comfortably stops (full range of motion). Then, lift yourself with two feet, and again lower yourself with one again. Do three sets of 10 reps on each leg.

3) Two-Joint Hip Flexor Stretch: This move is very run-specific and really helps to target the hip flexors and upper quads; which are areas



that are chronically tight; to create better extension and running cadence.

How: Kneel down on one knee (on a soft surface). Grasp that same side's ankle with the hand on the opposite side—all behind your body. The leg without the knee down should be firmly planted, foot down out in front of you. Once in this position, drive the pelvis toward the ground. Many athletes will need to use a towel to grasp their ankle until they become more flexible. Hold this stretch for 30 seconds and do three reps.



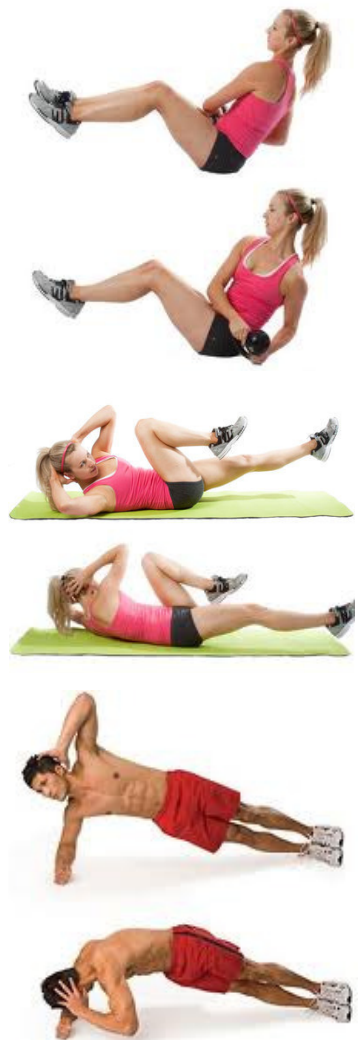
4) Hill Bounding: This is better categorized as a key workout, but in many cases can help to lead to better running mechanics.

How: Hill Bounding is a type of hill repeat where you focus on getting as much vertical bounce as possible, with long strides (totally opposite of the way you would approach a hill on race day). Think "long strides and low cadence" with these. A one-minute hill with a 6 to 10 percent grade is perfect. Take four minutes between repeats. Do six to 10 of these in the context of a 75-minute run.

5) Rotational Core Work: By now, almost all athletes have realized the importance of core strength. What many athletes fail to realize is that rotational core strength is more important as a functional exercise! Practically

any core specific abdominal move is fine, as long as it has a rotational component. For example, bicycle crunches.

How: There are many ways to do rotational core work. Inclined sit-ups and bicycle crunches are common. Any core exercise that has a rotational component will suffice.



The integration of these five moves into your regular functional strength routine can help fix bad running form or help maintain already strong technique. Just two sets of each, once or twice each week, is all it takes.

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Please bring the coupon to your appointment to redeem



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