

# Core Therapy

Providing a Holistic and Professional approach to Sports Massage Therapy.

**November 2016**  
Newsletter

[www.coretherapy.co.uk](http://www.coretherapy.co.uk)



## ***Pilates Issue***

***I am now a qualified Pilates Instructor ...Please contact me for details of 1-2-1 sessions***

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Developed in the 1920s by Joseph Pilates to rehabilitate injured detainees in war camps, the Pilates method is renowned today for its benefits in improving flexibility, strength, and body awareness. For athletes, Pilates has proven to be a powerful cross-training secret.

Pilates will help alleviate pain caused by endurance sports and strengthen the essential muscles that make you a stronger and faster runner, cyclist and more efficient swimmer, "It develops stability, strength, and flexibility, which are all needed to gain speed and prevent injury."

Initial Pilates sessions can be eye-opening for athletes: "If you are new to Pilates, you may walk away from a session not necessarily feeling tremendous muscle fatigue or soreness, but you will be surprised how imbalanced your muscles are. Pilates workouts are designed to make you physically balanced while building strength in the muscle groups specific to endurance sports. We focus on the smaller, deeper muscles that support your dominant, superficial muscles."

**P**OSTURE - Improve body alignment and posture

**I**NJURY prevention and rehabilitation

**L**OVE the flow and precision

**A**WARENESS - Improve balance and coordination

**T**ONE your muscles

**E**MPOWER your breathing and relationship to relaxation

**S**TRENGTHEN your deeper core stability muscles (your spinal scaffolding)

BUT FIRST,  
*pilates*

..... This is my 'sell it to you' bit!

I love this analogy...

The musculoskeletal system is essentially a busy downtown roadway. The bones are the roads, muscles are the cars, and other soft tissue—tendons, fascia, ligaments—are various traffic lights, stop signs, construction roadblocks, clogged intersections, etc. Traffic runs smoothly when there are fewer constrictions around which cars must navigate. When the skeleton is aligned and soft tissue is properly organised, your muscles' firing patterns are not blocked or slowed. Muscles can "drive" more efficiently and utilise less fuel without constant stopping, starting, and turning. Thus, the body expends less energy to move.

Below are some progressive exercises to increase your skill level in maintaining posture. These exercises target your awareness of the muscles and postural positions that are key to maintaining alignment. Over time, your coordination of the firing patterns of these muscles will transfer into more body awareness for both everyday life and athletic-specific movements.

## 90/90 Chair Breathing:

1. Lie with your back flat on the ground and heels on a chair. Your hip and knee joint angles should be at 90 degrees.
2. Dig your heels into the chair to engage your hamstrings (ideally you will engage your glutes first)
3. Place your hands on your hip bones.
4. Breathe in, imagining the air filling the back lower half of your lungs. Keep your shoulders and neck muscles completely relaxed. They should not engage at all while breathing in.
5. As you breathe in, you should feel your back muscles push into the ground and your lower abdominal muscles push into your hands.
6. Continue digging your heels into the chair as you breathe.

It can be tough to coordinate all of this when you first start. It is easy to do at the beginning of the day and gets the brain and body synching, therefore, setting up your central nervous system to fire these muscles around the diaphragm and initiate proper breathing techniques.

## Wall Sits:

1. "Sit" against the wall with hip and knee joints at 90 degrees.
2. Push your shoulder blades into the wall but keep your trapezius muscles relaxed.
3. Push your low back into the wall, minimizing the curve in your lower lumbar spine.
4. Maintaining contact with the wall and your

entire back, breathe into the lower back half of your lungs as you did in the chair drill.

5. Feel your lower abdominal muscles pushing out and your low back and ribs pushing harder into the wall.

At first, it will be tough to coordinate the lower back, diaphragm, and upper back, **all while keeping the superficial muscles relaxed**. But with practice, you will be able to isolate the muscles that are responsible for better posture, while negating the muscles that pull you out of alignment.



## Wall Sits with Arm Slides:

Once you have mastered the breathing technique and muscular firing pattern of the wall sits, add some movement to the wall sits.

1. Put your palms against the wall. Keep your posterior chain— lumbar spine, shoulder blades, back of the head— flush with the wall.
2. Your entire arm – biceps, forearms, wrists, hands— should maintain contact with the wall. "Pinch" your shoulder blades toward your spine so that they can "pull" your arms into the wall without the help of the trapezius muscles.
3. Now slide your arms up and down the wall, focusing on maintaining contact with the wall. This should work the muscles around your shoulder blades, and you may get sore in that area from working these often neglected muscles.

It is vitally important that you do NOT engage your trapezius muscles to lift your arms. Once they engage, stop raising your arms and slide them back down. Continue sliding up and down, but only as far as you can while maintaining proper technique. Continue to pay attention to your lower back and abdominal muscles. Ensure that they remain engaged as you perform these arm slides.

Posture skills can be incorporated into your everyday life and your training bouts.

## High Hamstring Tendinopathy? Top 10 Tips...

In most cases, hamstrings are tight because they are actually *over-lengthened* rather than tight.

When a muscle is tight because it's over-lengthened, stretching will not resolve the problem. It is already over-stretched and, in fact, stretching will most likely irritate the muscle further. When dealing with a muscle that is tight due to over-lengthening, it is usually helpful to look at the opposing muscle group to figure out where the problem lies.

The hamstrings attach to the ischial tuberosity, which is a part of the posterior aspect of the pelvis and is typically where runners feel pain (your sitting bones). The opposing muscle group for the hamstrings are the quadriceps. The quadriceps attach to the anterior aspect of the pelvis. The hip flexor muscles assist the quadriceps and they attach on the anterior aspect of the pelvis and the lumbar vertebrae of the lower back, just above the pelvis.

The hamstrings and quadriceps muscle groups work as opposing muscle groups to keep the pelvis stable; however, the movements and forces involved in running makes this task much more difficult. Picture guy wires attached to either side of a telephone pole. The telephone pole being our pelvis and spine, the guy wires being the hamstrings and the quadriceps. The guy wires, our opposing muscle groups, maintain tension on the pole and our pelvis, keeps it in its proper position.

However, unlike the telephone pole, the pelvis has movement, so keeping it balanced becomes much more complicated. The quadriceps are a stronger muscle group than the hamstrings. This is evident when lifting weights as most people can lift more weight on the leg extension machine (quadriceps) than they can on the leg curl machine (hamstrings). This is a normal strength difference and when the muscle groups stay within their normal strength difference ratio, all is well.

On the other hand, this strength ratio can become out of balance, especially in runners. When this happens, it is typically the quadriceps that win the strength battle and begin to pull the pelvis into a slight anterior rotation. The hip flexors get in on this action too and assist the quadriceps. As the pelvis rotates anteriorly, it raises or elevates the

hamstring attachment site, which means the hamstrings get pulled up and as the pelvis shifts they become over-lengthened.

In the massage world, this over-lengthening is sometimes referred to as "locked long." The hamstrings hang onto their attachment site for dear life. Over-lengthening a muscle greatly increases its risk of injury. Again, picture the telephone pole now being pulled to one side by a stronger guy wire, the quadriceps. The other guy wire, or the hamstrings, is now being pulled and is over-stretched or over-lengthened. Along with over-lengthening the hamstrings, pelvic anterior rotation also shortens our back muscles. The typical scenario is tight, shortened quadriceps; tight, shortened hip flexors; tight, shortened back muscles; and tight but *over-lengthened* hamstring muscles.

Then, to compound the problem further, when we run, we swing the leg forward, and the hamstrings are lengthened even further and the stress on the hamstrings, especially at the attachment site, is increased even more. This additional stress puts your hamstrings at an even greater risk of injury. This can result in tendonitis and even muscle tearing. Pain is the first warning sign and you are wise to pay attention to this signal.

Here are some tips for prevention and/or treatment:

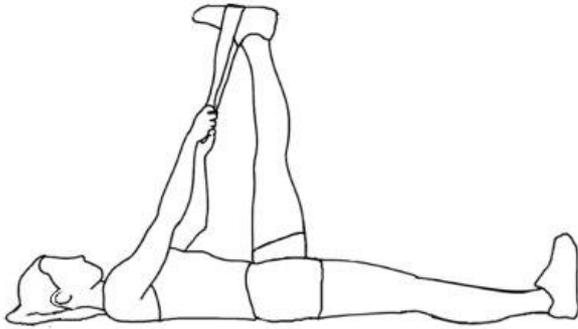
1. Stretch your quadriceps and hip flexors. The **Lunge Stretch** targets the hip flexors. Your hip flexors also join the bottom half of your body to the top half of your body. The Psoas is considered to be a core muscle that acts as a keystone much like an arch will in a building structure.



So... lunge position - front knee over front foot, drop the back knee, tuck the pelvis under (by sliding a hand down the lower back, shoulders in line with hips). Check your form and position in a mirror if possible before raising both arms and pulling shoulders back and down relaxing your back foot.

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- Stretch your hamstrings by lying on your back, NOT by standing up and trying to touch your toes.



- Use the low back stretch and pelvic tilt exercise to stretch your low back muscles
- Strengthen core muscles... try incorporating planks into your routine.
- Strengthen hamstring muscles with leg curls. Use no weight or a very light weight at first. Focus on moving the muscle through its full range of motion, hold it briefly at the top of the action, and then return slowly. Recommended twice a week.
- Ice the attachment site immediately after any exercise for 10 minutes. Try wearing compression shorts to help support the affected muscles.
- Cross-train to keep cardio up.
- Massage Therapy can help by relaxing tight muscles, improving flexibility, facilitating circulation and healing, and restoring joint range of motion.
- Visit your GP if the pain is persistent, if you are limping or altering your gait in any way, and also if you notice any bruising.
- Physical Therapy can help healing and work on correcting any muscle weaknesses and/or imbalances.

## The 7 Habits of Highly Effective Athletes....

The following seven habits are behaviors that most highly effective athletes — not necessarily the fastest athletes — have in common and practice every day.

### 1. They set various types of goals.

There are two types of goals: outcome goals and process goals.

**Highly effective runners recognise the importance of both.**

Outcome goals are what most people think of when they talk about goal setting. These are the intended result of all your hard work and preparation and are specific (e.g., lose weight,

finish the race) and measurable (e.g., finish in 2 hours, place top 5 in age group). Thinking about outcome goals induces both excitement and nerves. But they're also largely out of your control. And let's be honest, if you knew exactly how fast you were going to run on race day, a lot of the fun would be taken out of the whole experience. That's what makes outcome goals so exciting. And nerve-racking.

Equally as—or even more important—are process goals. They're not as exciting and probably won't make you nervous when you think about them. But the great news is that process goals, unlike outcome goals, are completely in your control. And the more of them you achieve with regularity, the more confidence you'll gain.

These two kinds of goals are linked. The more successful you are at accomplishing your process goals—habitual actions you can check off every day, week and month or block, such as getting 8 hours of sleep a night, making healthy food choices at mealtime, doing core-strengthening and injury prevention exercises daily, etc.—the better you'll set yourself up for achieving your outcome goals.

### 2. They enjoy the process.

**Highly effective runners enjoy the ongoing process of training and competing or challenging themselves.**

Many runners make the mistake of only setting outcome goals, and their idea of success or enjoyment hinges upon hitting a desired time in workouts or races or securing a particular placing on race day. This can induce unnecessary pressure and lead to frustration and feelings of failure if these goals aren't achieved, thus killing the fun factor of one of our favorite activities.

### 3. They value consistency.

**The biggest thing is consistency ...no big jumps in training, just taking baby steps.**

Simple advice, right? Well it is, but that doesn't mean consistency is an easy thing to achieve. You need to work at it every day. Consistency doesn't just mean running on a regular basis (although there's a lot of value in that) but it's more about developing good habits that become part of your running lifestyle. Whether you are a beginner or elite or just a little out of shape, consistency will go a long way in helping you to eliminate excuses on your way to improving your fitness, enhancing

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enjoyment and becoming a more effective athlete.

Find a training program that **works for you** and stick with it instead of chasing the latest hot trend. Establish a weekly routine that works for **your schedule** and don't waver from it. **Make time for the preventative exercises** you need to do to help ward off injury (even if that means training 10 minutes less). Get to bed at a decent hour every night. Remember: Success is the result of doing the right things day after day and week after week."

### 4. They train at different speeds.

#### Variety being the spice of life.

Don't be a one-speed wonder: even if racing isn't your thing, or you don't consider yourself to be super-fast, get out of your comfort zone a couple times a week and do a variety of workouts at different speeds and intensity levels.

The lack of variety in your weekly routine will eventually lead to a physical and mental plateau.

Training at different speeds and intensities over a variety of terrain will not only use different energy systems but will also add some newfound enjoyment to your normal running routine and break up the monotony of running at the same pace every day, help ward off annoying overuse injuries and contribute to helping make you into a highly effective runner.

### 5. They take their recovery seriously.

A wise coach once told me, "**You are only as good as your recovery**" And taper!

Why? Because **recovery is when improvements happen**. Yes, you need long runs, challenging workouts and steady weekly mileage to break out of your comfort zone and propel you to better race performances, but if you can't recover from those hard efforts, they aren't doing you much good. Without rest, not only are you denying your body time to adapt to the stress it's under and to enable the gains you have made to take hold, but also you are sure to start your next workout under-fueled, exhausted, or possibly fighting off illness or injury.

As you rest — sleeping or engaging in something only **slightly** active, such as your easy and short (level 2 out of 10) run days or appropriate warm-ups and cool-downs — you are reaping the benefits from your hard workouts. Stressed bones, broken-down muscle tissue, and exhausted energy systems are repairing themselves to come back stronger for your next workout and power you to a higher level of performance.

Don't be afraid to listen to your body – the generic schedule you might be following is only a guide, remember!! Don't be a knucklehead and run hard all the time. Have the confidence to take extra recovery.

### 6. They focus on quality.

#### Every outing has a purpose

More isn't bad, but it's not always better. While a loaded racing schedule, impressive long runs and big mileage weeks will certainly help foster improvement, highly effective runners know it's the quality that matter most at the end of the day. In regard to training, highly effective runners will not run mileage for mileage's sake, or force a 10th repetition in an interval workout if their pace starts to fall off considerably after number 8.

Remember: **Don't count the miles—make the miles count.**

### 7. They recognise and celebrate their achievements—no matter how small.

As highly effective runners, we are always looking ahead toward the next goal, which is an integral part of continual improvement. Equally important, however, is that we take the time along the way to recognise and celebrate our achievements. Every finish line is worthy of a celebration.

And when someone congratulates you after a race, even if it fell short of what you were setting out to do, be gracious and just say thank you. No one likes an unappreciative athlete. Even if you're disappointed with your performance, someone watching might be inspired by it, and that's certainly an unintended achievement worth celebrating at the end of the day.

Thank you to Triathlete-Europe Magazine for providing the base to this article.

## How often should I replace my running shoes?



Unfortunately, there is no universal answer to this question, given that many factors figure into the lifespan of a shoe: the construction of the shoe, your physical makeup, the way in which you strike the surfaces you're running on, and even the climate you live in.

That said, most running shoes will last between 300 and 500 miles, which is, admittedly, quite a range. Minimalist shoes and racing flats, since they have less material underfoot and are generally less durable, will typically last 200 to 400 miles.

So how do you know if your shoes need replacing? Look for the obvious signs of wear and tear, and listen to your body.

Begin by considering the outsole, the rubber part of the shoe that comes in contact with the ground. Over time, the tread of the outsole starts to wear away, just as tyres on a car eventually become bald, and you begin to lose grip on the ground below. This is the most obvious sign of wear and tear — but the outsole tells only part of the story.

What is harder to see is what happens inside the shoe when you run, in the midsole, where the cushioning and support are housed. Every time your foot meets the ground, you compress that midsole area. It responds by absorbing the blow and returning energy to you as you begin the next stride. This process is repeated thousands of times during a run.

As you can imagine, the midsole becomes compressed and fatigued over the course of a run and then needs time to rebound in between runs to return to its original, bouncy state. After a few hundred miles, however, the midsole breaks down to the point of no return. You can't see this, but you can sure feel it in a sensation of "flatness" or "deadness." The shoe doesn't have the bounce

that it once did. Little aches and pains begin to arise. You're not injured, but your body is talking to you. It's telling you that your shoes need changing. You should listen.

Still not sure if you should swap out your shoes? Head to your local running store, and try on a fresh new pair of your favorite training shoes side by side with the ones you've been running in. Feel the difference? Often, it will be clear. You'll feel higher off the ground in the newer pair if the midsole of your current pair is compressed beyond the point of no return.

Remember, don't go solely (excuse the pun!) by how the outsole looks to determine whether a pair needs to be replaced. If you do most of your running on a treadmill, a smooth road, or a groomed trail, the outsole of the shoe can look fine for a long time, but the internal damage is still taking place. Note in your training log when you start running in a new pair of shoes, and keep track of how many miles you run in them. Over the course of a 12- to 16-week training cycle, you can expect to go through between two and three pairs of shoes. When you start approaching the end of the shoes' life, it's a good idea to start breaking in a fresh pair, as you phase out the broken-down model. Your body will thank you for it.

## Sports Massage

### Prepare, Prevent, Perform

## Benefits and Effects

Sports Massage uses many of the characteristics of Swedish Massage whilst incorporating remedial and deep tissue massage techniques on specific troublesome or well used muscle groups. Although given the term "Sports", the massage technique is used for muscle problems whether incurred in a sporting event or through other activities such as gardening, decorating, DIY, etc.

Sports massage can be used before, during and after sporting events. The main emphasis on treatments is to maintain the body in good condition or to address specific needs where a client is suffering from aches and pains in certain muscles. When muscles have been overworked, causing soreness, stiffness, a sports massage can alleviate these conditions through boosting the circulatory and immune system thereby leaving the client feeling refreshed and relaxed.

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**Pumping** – The stroking movements in massage suck fluid through blood vessels and lymph vessels. By increasing the pressure in front of the stroke, a vacuum is created behind. This is especially important in tight or damaged muscle tissue as a tight muscle will squeeze blood out like a sponge, depriving the tissues of vital nutrients and energy to repair.

**Increased tissue permeability** – Deep massage causes the pores in tissue membranes to open, enabling fluids and nutrients to pass through. This helps remove waste products such as lactic acid and encourage the muscles to take up oxygen and nutrients which help them recover quicker.

**Stretching** – Massage can stretch tissues that could not be stretched in the usual methods. Bundles of muscle fibres are stretched lengthwise as well as sideways. Massage can also stretch the sheath or fascia that surrounds the muscle, so releasing any tension or pressure build up.

**Break down scar tissue** – Scar tissue is the result of previous injuries or trauma and can affect muscle, tendons and ligaments. This can lead to inflexible tissues that are prone to injury and pain.

**Improve tissue elasticity** – Hard training can make tissues hard and inelastic. This is one reason why hard training may not result in improvements. Massage helps reverse this by stretching the tissues.

**Opens micro-circulation** – Massage does increase blood flow to tissues, but so does exercise. What massage also does is open or dilate the blood vessels and by stretching them this enables nutrients to pass through more easily.

### Physiological effects of sports massage

**Pain reduction** – Tension and waste products in muscles can often cause pain. Massage helps reduce this in many ways including releasing the bodies endorphins.

**Relaxation** – Muscles relax through heat generated, circulation and stretching. Mechanoreceptors which sense touch, pressure, tissue length and warmth are stimulated causing a reflex relaxation.

Happy Days!

**Wendy is a qualified sports massage therapist holding a Sports Performance Services Level 4 Diploma and a Level 2 Triathlon Coach Certificate as well as being a keen athlete herself.**

**Recently qualifying as a Pilates Instructor to offer 121 and small group sessions.**

See [www.coretherapy.co.uk](http://www.coretherapy.co.uk) for prices

**Current Offer**

**3 x 60 minute sessions for £120**

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