

### **Pilates For Running**

#### Run Faster and Further with Less Chance of Injury

Whether you're a competitive runner, training for your first marathon or a weekend jogger, running is a great way to boost your cardiovascular fitness and muscle tone. However, failing to consider musculo-skeletal efficiency can result in injury and below par performance. Pilates offers an excellent way to achieve injury prevention and improve your personal best, and is an important part of elite athlete training programs.

#### **How Pilates can Help with Running**

Joseph Pilates created his exercises as a way to increase overall fitness for anyone. Today, they are recognized for building strength, endurance, balance and flexibility – essential attributes for both short and long distance running, no matter what your level.

Additional benefits of regular Pilates practice, whether in a one-to-one sessions or a class, include good posture, muscle control and movement patterns (biomechanics) – key factors in getting the most out of your runs.

All of this adds up to more output for less effort, allowing you to run faster and further with a reduced risk of injury.

# **FIVE** Key Benefits of Pilates for Runners

## 1 Improved Posture = Maximum Efficiency

Pilates is an excellent tool for improving posture and dynamic trunk rotation, both of which are imperative in maximising efficiency when running.

Good posture leads to good segmental spinal movement, allowing load to be shared more evenly among spinal segments, joints and supporting musculature. A strong running style relies on upright posture and good trunk rotation. A common inefficiency with running is to run with a forward head position, bunched shoulders and arms stiffly by the side. This requires a lot more effort for less output.

### 2 Improved Muscle Control in the Trunk and Limbs = Increased Running Speed

We focus the word muscle control rather than solely on strength, as it is more important to be able to move your trunk and limbs with powerfully and efficiently through a full range of motion.

It is as important to relax certain muscles as it is to work them at different times For example, in the stance phase of running it is important to have glutei (hip extensors) activating and at the same time be able to eccentrically work and lengthen the psoas (hip flexors). This combination will allow a powerful, long stride essential to running a good race. A lot of the exercises in Pilates work with muscle control and a good instructor will tailor these specifically to the sport you are training in.

Similarly for the trunk, It is necessary to have strength in your deep abdominals or 'core muscles' but, more importantly, to have muscle control through range. Have you ever seen the gym junkie who is supposedly fit and definitely strong, but is 'stiff as a board', has poor posture and back pain? Whilst strength is important, muscle control, flexibility and good posture are essential. What's the use in being strong if you cannot efficiently lift your arms above your head because your trunk muscles are so tight?

Regular Pilates practice helps to improve posture, strength and muscle control and, in turn, break down bad habits of a lifetime. It can take a lot of work but if we focus our energies under expert guidance we can retrain movement patterns. In doing this your body can work more efficiently and your pace can improve.

### 3 Controlled Breathing = Greater Stamina

Not all of us use our lungs effectively; the ability to take a deep breath and control our breathing is not something we always consider in training. However, it is important to be able to use our lungs effectively as they are the means to transporting oxygen to our blood stream.

The diaphragm is our primary breathing muscle and needs to be exercised. Pilates will train you to use your diaphragm and lungs effectively by working with breath control while you exercise. You will be able to run faster and further with less shortness of breath and fatigue.

## 4 Improved Symmetry = Better Running Mechanics

Body asymmetries develop because of poor body biomechanics, causing certain muscles to become

overused while others are underused (a common trait in runners). This can result in a variety of ailments from lower back pain to knee pain. For example: over activity in the lateral quadriceps and ITB combined with weakness in the gluteus medius will lead to poor knee mechanics and possibly anterior knee pain. Correcting asymmetries allows the load be delivered through the body more symmetrically, thereby effectively 'sharing the load'.

All of the above are particularly important with running, which is a repetitive, impact exercise at high risk for overuse injuries such as stress fractures and tendonitis. See our <u>Overuse Injuries</u> in Sport & Exercise article.

Pilates helps address muscle imbalances by firing up muscles that can get lazy, such as the gluteus medius. There are many exercises in Pilates in various positions that can be used to fire up this muscle.

#### 5 Flexibility = Injury Prevention

To assist injury prevention, it is essential to cool down following a run with passive or static stretching to restore the resting length of the muscles. (see <u>London Marathon 2015</u> article). To maintain flexibility it is also important to do dynamic stretching or stretching with movement (see <u>Dynamic Stretching</u> article).

Pilates exercises achieve this by getting you to move through your full available range with active and resisted movements. If your muscles are strong and long you will not only perform better, but help injury prevention.

#### **New to Pilates?**

If you are new to Pilates we recommend you have a 1:1 with an instructor (go to London City Pilates) who can assess you and help you to achieve your goals. Whether you start with a Mat class or Reformer class, give yourself 5 -10 classes to really feel and see a difference. Pilates will train your body and your mind to help your reach beyond your current goals and feel stronger than you ever have.

**Article by Martine Cooper, Chartered Physiotherapist**