



# PILATES PATIO

“Me thinks that the moment my legs begin to move, my thoughts begin to flow.” ~ Henry David Thoreau

Being in the think of summer and the festival season what better way to see the sights than to run or walk. This Running and Walking Special Issue of Pilates Patio’s newsletter is dedicated to running and walking. Whether you’re a competitive or recreational runner or just walk while playing golf, Pilates can help enhance the experience, bringing greater enjoyment to the remainder of the summer season through improved physical condition, increased energy and more.

## Strength training improves performance and prevents injury

A little bit of strength training for anyone can be beneficial. For anyone who is running or walking regularly, strength training and muscle toning can help prevent injuries, increase your movement efficiency and overall enjoyment of your sport. Strength training can help your body withstand the impact of the forces of running on hard surfaces. Most runners and walkers enjoy being outdoors and the feeling of moving. In comparison, strength training can seem quite stationary and ‘slow’. Starting with a few exercises on your own at home or even a class once a week can be helpful.

Form is big part in working the intended muscles and correctly. Runners and walkers are prone to overuse injuries as they are performing the same movement repeatedly. Strength training and muscle toning is more than just increasing muscle size and strength. It’s also about evening out muscle imbalances. Muscle imbalances are also a contributing factor to injuries. Warming up muscles before starting your run or walk will allow muscles to work more efficiently.

### FOR WALKERS, SOME GOALS ARE:

**Goal:** Strengthen lower body, in particular the front and back of the thighs (quadriceps

and hamstrings) to decrease strain on the ankles, knees and hips.

**Exercises:** Pilates on the reformer is great for this. There are many exercises on the reformer that target the muscles in the legs, quadriceps, hamstrings, abductors and adductors, as well as the internal and ex-



### IN THIS ISSUE

Strength training improves performance and prevents injury	1
Running vs. Walking	3
Pilates and Runners	4
Pilates and Walking	5
Runner’s Knee	6

Continued.

ternal rotators. Strengthening the deeper, smaller muscles that are closer to the bones will help increase stability. An added benefit to working on the reformer is that it is dynamic. This movement creates instability with forces stabilizers, in particular the 'core' region to kick in.

**Goal:** Increase core strength. When people get tired or have a weak 'core' they tend to collapse forward, head goes forward, shoulders roll forward and spine flexes - overall poor posture occurs. This can create lower back pain and lead to inefficient breathing.

**Exercises:** Posture and alignment are a large part of the focus in Pilates. Increasing core strength is to enable better posture and alignment. For all exercises in Pilates, what is first and foremost is posture. While it takes time to achieve the posture you may want, and in some cases it may never happen, improvements will be seen slowly and it all starts with increasing 'core' strength. This is increased strength and stability in the pelvic region, abdominals as well as the back and along the spine. With improved posture lower back pain decreases and breathing becomes more efficient. Exercises both on the

mat and reformer are great ways to work on 'core' strength, both where the 'core' muscles are working as stabilizers or as the primary mover.

### FOR RUNNERS SOME GOALS ARE:

**Goal:** Hip strength. Stronger the hips, the more stable the pelvis. With unstable hips, the pelvis can become misaligned or unstable leading to problems with knees and ankles. Every time your foot hits the ground while running, if your hip, say the left, isn't strong enough to hold your pelvis stable, the left hip will sway outward and other body parts will need to compensate for that weakness.

Iliotibial band friction syndrome is a common injury among people with weak hips. Weak hips can cause strain on the IT band. When this band is irritated from overuse, pain can be felt on the outside of the knee.

**Exercises:** Pilates exercises both on the mat and reformer can be helpful. Strengthening the core will create stability in the pelvic region. Many exercises on both the mat and reformer will help strengthen and stretch the hip flexors and hip extensors. On the reformer, with feet in the straps, many of the exercises are great for helping strengthen the hip flexors and stretch out the hamstrings and hips. There are many

other exercises on the reformer that will focus on hips as well. There are also many exercises on the mat that can be done. Exercises lying prone working the glutes and hamstrings to extend the hip; exercises lying supine that work the abdominals also usually will get the hip flexors working as well i.e. single leg stretch, double leg stretch and more.

<http://www.pilatespatio.com/exerciseVideosOttawa.html>

### GOALS FOR INTERMEDIATE RUNNERS:

**Goal:** Work on each side of the body independently so each side is pulling its own weight. Work on muscular imbalances. Increase core strength.

**Exercises:** What is great about using the reformer is that many things can be done one side at a time. For example, when doing upper body exercises, one arm at a time may be used. This usually means that the stabilizers need to work more to maintain form. There is a series of *single leg* exercises which are great for working on specific needs on each side of the body. The list goes on. While working one side at a time may take more time, it's great for feeling and then working on muscular imbalances and as a by product increasing core strength and stability.

# RUNNING VS WALKING

Brisk walking can be almost as challenging as jogging. Why? When walking at speeds faster than 3.1 miles/hour, stride length naturally increases. As we know, a longer stride length is less efficient requiring more energy to move your legs. This in turn requires more arm and torso movement, leading to increased torso and hip rotation. All of this means higher aerobic demands and more calories being burned. Research has shown that maximal levels of exertion, oxygen consumption, is only slightly lower for race-walkers than for runners and moderate to intense levels of exercise, oxygen consumption levels between race walkers and runners are almost equal. Race-walkers can reach speeds as high as 9 miles/hour! Running is also popular and has an

obvious fitness edge over walking. Runners use energy quicker than walkers. So, a runner doesn't have to exercise as long as a walker to get the same benefits. For some young people walking briskly may not raise their heart up to that 60%-80% target



heart rate zone for optimal training. For them running may be a more efficient cardiovascular form of fitness than walking. However, the risks for runners is greater. In par-

ticular, risk of injury. Runners face greater risks of strains, sprains, blisters and spurs. The risk factor for runners increases with the frequency and duration of the exercise. Foot to surface impact ratio for running is three to four times your body weight compared to one times your body weight for walking.

The low impact of walking minimizes strain on the feet and joints resulting in fewer walking injuries. The drop out rate from running programs over a two year period is 50% or more compared to only 20% or less for walking.

Benefits of running and walking	Benefits of running	Benefits of walking	Disadvantages of running	Disadvantages of walking
Lower blood pressure	Calories are burned quicker	Low impact	High impact	Takes longer to burn calories
Lower risk of osteoporosis, cancer and heart disease		Minimum strain	Greater risk of strains, sprains, blisters and spurs	For young people it may not raise heart rate up to 60%-80% target heart rate zone
Improves cholesterol profile			Risk factors increase with frequency and duration	
Fat loss			Drop out rate is 50% or more	
Chance to clear mind				

## PILATES AND RUNNERS

There seems to be a Pilates class that can help with every sport and activity out there. It almost seems too good to be true that one form of exercise can affect the body's performance so positively in so many activities. Running is yet another activity that Pilates positively influences. How?

The first principle of Pilates and for our very life, is breathing. Breathing is especially important when our bodies are being pushed beyond its everyday limits. We have all seen the local neighbourhood runner running. Visualize this early morning or after work runner and consider her / his form. What is their posture like? Are they leaning forward shortening the space between their chest and legs thus allowing less space for their lungs to expand within their ribcage when inhaling leading to exhaustion? Or perhaps this runner is leaning backwards, compressing their vertebrae, putting tension on the joints in the spine, putting pressure on their quadriceps which can lead to sciatic problems as well as strains in the scapula (i.e. shoulder blades). Pilates can help with both of these issues either in a preventative manner before problems arise or in

a rehabilitative manner after problems have arisen.

For the runner that is leaning forward reducing the space within which their lungs can expand strengthening of back muscles and mid back muscles will help keep them upright opening up their chest allowing them to maximize their lung capacity. There are many exercises in Pilates for the back, lower, mid and upper back.

For the runner that is leaning back Pilates can help with balance and strength, again within the core, to keep the runner upright relieving muscular and joint tension.

When running you want to be as balanced as possible on each side



of the body so that there are no imbalances such as leaning or rotations to one side while running. Many exercises in Pilates can help bring these slight imbalances in the body to light and as result fo-

cus on the relevant muscles, however small, can be made minimizing imbalances resulting in a more comfortable and fluid run.

Running and Pilates share the quality that there is a mind-body relationship that plays a significant role in both activities. In Pilates the mind-body relationship has to do with the positioning of the body and engaging the appropriate muscles during exercises while implementing the basic techniques that set Pilates apart from other forms of calisthenics. A long distance runner when trying to remain focused on their goal, with some Pilates knowledge can turn their attention and focus to their body – how their head is balanced on their cervical spine, what their posture is like, whether they are leaning forward or back, whether their arms are swinging parallel to their body or across their body, how their body is moving in space – all factors that can either make the running experience more or less enjoyable.

# PILATES AND WALKING

Walking may be the most natural and simple workout there is. It's easy, inexpensive and a good way to get and keep in shape. Walking can be anything from a hike in the mountains, to a stroll along the beach. Walking with family and friends, walking the dog, or just walking to relax and unwind at the end of the day. It can be done anywhere and doesn't require any special gear. Walking is one of the most efficient low impact workouts available. Keep in mind however far you walk, you have to be able to walk back.

**So why walk?** Walking,

- prevents type 2 diabetes.
- strengthens your heart.
- is good for your brain.
- is good for your bones.
- reduces the risk of breast and colon cancer.
- improves fitness. Even in short bouts.
- improves physical function.

Regardless of how far or fast you walk, standing tall is im-



portant. How you hold your body when you walk will make a difference with your breathing, back support and whether your walk is pain free or not. Some body positioning tips:

**Legwork:** A common mistake is trying to walk fast by lengthening the stride. This is inefficient and can slow you down. It will burn more calories due to inefficiency. Instead of taking longer strides, concentrate on a powerful push off while the front foot lands closer to the body.

**Footwork:** Step heel to toe and not flat footed. Contact the ground with your heel. Roll your foot forward over the centre of your foot and push off with your toes. This not only allows the ankle to move through its complete range of motion but also provide propulsion into the next stride.

**Hips:** Rotate hips forward and backwards as you walk. Your waist should twist. Restricted hip movement decreases speed.

**Torso:** Leaning forward or backwards will slow you

down. Keep your torso upright.

**Arms:** Keep arms close to the body, elbows at 90 degrees and hands relaxed. Swing arms forward and back without crossing the mid-line of your body. Speeding up arm swing will increase speed and legs will follow.

Pilates can be beneficial in many ways. The importance of body alignment and form when doing Pilates will translate into the form maintained while walking. Work on the reformer with you feet in the straps will help increase flexibility and mobility in the hips while maintaining a stable pelvis. The work towards improved posture throughout Pilates lessons will help minimize leaning, forwards or backwards, of the torso while walking. Increased strength and stability around the shoulders and in the scapular region will allow for greater swing of the arms at the shoulder joints. The Pilates method of breathing itself applied while walking will help oxygenate the muscles allowing you to get more out of your walk.

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As the name suggests, runner's knee is a common ailment among runners. But it can also strike any athlete who does activities that require a lot of knee bending like walking, biking, and jumping. It usually causes aching pain around the kneecap.

Runner's knee isn't really a condition itself. It's a loose term for several specific disorders with different causes. Runner's knee can result from:

- Overuse. Repeated bending of the knee can irritate the nerves of the kneecap.
- Overstretched tendons (tendons are the tissues that connect muscles to bones) may also cause the pain of runner's knee.

- Direct trauma to the knee, like a fall or blow.
- Misalignment. If any of the bones are slightly out of their correct position -- or misaligned -- physical stress won't be evenly distributed through your body. Certain parts of your body may bear too much weight. This can cause pain and damage to the joints. Sometimes, the kneecap itself is slightly out of position.
- Problems with the feet. Runner's knee can result from flat feet, also called fallen arches or overpronation. This is a condition in which the impact of a step causes the arches of your foot to collapse, stretching the muscles and tendons.
- Weak thigh muscles.

# STUDIO

Running & Walking Routes in  
Ottawa, ON, Canada

<http://www.stepwhere.com/listpaths/country/43/region/37/city/5906>

You can also find us on [Facebook](#)

Or follow us on Twitter [@pilatespatio](#)

Learn more about Pilates on our [blog](#).

**New Client Special—First class \$15.**  
Mat or reformer.  
May be booked as a private session.

## RUNNER'S KNEE

Runner's knee is also called *patellofemoral pain syndrome*. Pilates can help strengthen the muscles in the leg around the knee. In particular, leg exercises on the reformer can strengthen the quadriceps, hamstrings, adductors and abductors supporting the knee all around. Pilates can also help with tracking of the joints, in particular the patella, knee cap. Footwork on the reformer can help bring to light excess pronation or supination of the feet which in turn can be corrected.

