

## ISSUE 7

## A: Tapering

## B: Hips & Pelvis (Focus Area)

### Tapering

After months of hard work, sacrifice and preparation, the big day looms ever closer. It is around this time that fears, concerns and doubts can start to creep in. You start to wonder if you have trained hard enough and long enough to complete your first London Marathon. This anxiety can push a novice runner to make a crucial error in thinking. With the clock running down to the Marathon they *increase* their workload, in effect, trying to cram in extra miles in a late attempt to gain extra fitness.



Don't let this be you! It is the complete opposite of what you need to do. These last days before the event are an absolute crucial period for restoring and preparing the body for the onslaught to come.

In the 2 to 3 weeks leading up to the marathon it is vital to **reduce your training workload and intensity gradually and progressively**. This section of your training is known as **tapering**, and it is critical to your success, with numerous physiological benefits.

Before we address the technical reasons why tapering works, it is important to allay some of the common emotional concerns. Of course, the prospect of the marathon feels daunting, it's part of what makes it such a legitimate challenge. And some amount of apprehension can actually be beneficial. In fact, psychologists have a name for it, eustress, which literally means 'good stress'. It is a level of concern that can help you stay focused and motivated.

But don't let the thought of the challenge overwhelm you. Provided you are injury free, have trained reasonably regularly and have completed at least two long runs, you should be able to complete the course. Just follow the guidelines for tapering and stick to your game plan during the marathon, and you should be just fine.

### Why tapering is important

Those endless hours of training have a very specific purpose. They're all geared towards bringing about particular outcomes in the body. Without the series of physiological adaptations that occur, you won't be physically prepared for the demands of a marathon.

These adaptations include improving aerobic capacity, increasing the body's ability to store and use glycogen, and improving the efficiency of the heart and lungs. And that's not all; you will have strengthened connective tissue, and increased the number of capillaries in the muscles (and thus the body's ability to provide oxygen to your muscles). And the chances are your running economy will have improved, your resting heart rate will be lower, and your breathing rate at higher intensities will be more controlled.

It's really remarkable just what a transformation your body goes through. But here is the thing; much of that adaptation occurs during your periods of rest and recovery. With the marathon so close, it is essential that you reduce your training load sufficiently in order that your body rests and repairs sufficiently.

The high mileage runs can deplete levels of muscle glycogen, essential enzymes and antioxidants. All these levels can be restored, and damaged muscle fibres replenished during a period of suitable tapering. What is more, slowly reducing your intensity in the last 2 to 3 weeks will help prevent overall fatigue and bolster your immune system. The goal is to get to the start line refreshed and in optimal health, not at breaking point.

Getting the tapering process right can be a tricky business. Let's look at a few pointers that will help you get it right.

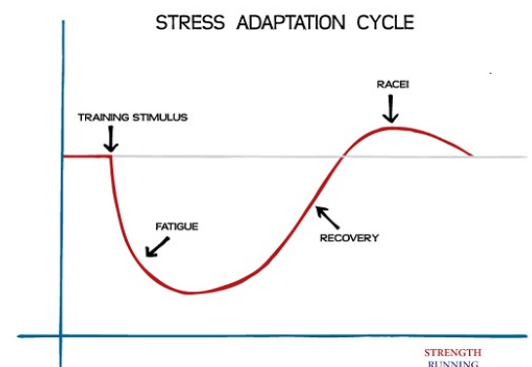
### How to taper properly

First, you need to know when to start tapering. Ideally, that should be 21 days before race day. It is important to embrace the process properly.

#### Week one

Most importantly, you need to **cut back on your mileage**. The first week of your taper, cut back to 75% to 50% of your previous weeks overall distance. At this stage, it's still ok to run three or four times a week but cut back significantly on your longer runs. This should include cutting your weekend run back to about 10-12 miles.

In addition, it is time to stop high intensity runs. So, at this point you **do not do any hill repeats, hill running or sprints**. This is because you are looking to avoid any further tissue damage that might not heal in time for race day.



If you have been doing any strength training, it is time to cut back on that too. There is little to be gained in terms of strength work at this stage. As an alternative, [consider a deep tissue massage](#). It will probably feel like a work out in itself. And the type of massage needed to untie knots, and restore some balance in your muscles, is best done at least a week before the marathon.

Finally, during week one of the taper, look to increase your intake of protein. This will help repair and restore muscle tissue. Good sources of protein that include the majority of essential amino acids include fish, Greek yoghurt, soya beans and chia seeds.

### Week two

Now you should be significantly reducing your workload. Absolute maximum should be 50% of the volume of your longest week. It might almost feel like you are cheating, but you need to **slow down** too. Your runs will be run **slightly slower than marathon pace** and will probably feel ridiculously comfortable, and that's fine (however, it's good to do just a couple of miles at marathon pace during one of your runs). Believe us, your body will thank you for this rest later.

As a rough guide, your longer weekend run should be 8 to 10-miles, and your week days should be no more than 4-miles. And although you are running less, try and keep your diet balanced and healthy at this point. **Do not cut back on calories**. However, if you are partial to any processed foods or takeaways, look to avoid them until after the marathon. Your body needs proper nutrition to replenish muscles at this juncture.

You'll need plenty of antioxidants in your diet at this stage too. They will help combat oxidative stress. Good sources of antioxidants will include spinach, broccoli, red bell peppers, carrots, tomato based products and avocados. Good fruit sources will include blueberries, raspberries and strawberries, to name just a few!

### Week three

In this last week before the marathon it is time to completely wind down. Any runs you do this week should not exceed 4-miles, and they all should be done at a gentle pace. To stay loose, and help overcome anxiety, it is useful to do a 2-mile run 3 days and 1

Sample Marathon Taper Plan

	MON	TUES	WED	THURS	FRI	SAT	SUN	TOTAL
	5	10 (7@MP)	5	10 (W/ HILLS)	REST	20	REST	<b>50</b>
TAPER WEEK 1	4	8 (6@MP)	4	8 (W/ HILLS)	REST	16	REST	<b>40</b>
TAPER WEEK 2	3	6 (5@MP)	3	6	REST	10	REST	<b>28</b>
TAPER/ RACE WEEK	3@MP	5 (3@MP)	3 (EASY)	REST	REST	RACE 26.2	WALK 1-2	

day before race day. This week is far more about restoring the body. Focus on four key elements. How you eat, what you drink, how you rest and how you sleep. Make sure you take on board an adequate amount of carbs (but don't try to carbo-load unless you are VERY clear on what you are doing). Go easy on the coffee, and try not to drink alcohol if you can avoid it. Work at staying hydrated, stay off your feet as much as you can, and sleep as much as you can.

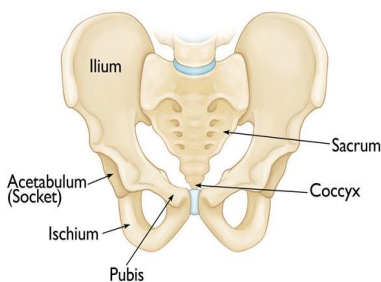
Follow those guidelines as closely as possible, and you should be good to go.

## Issue 7: Focus Area – Hips and pelvis

Injuries involving the hips and pelvis can have serious long-term implications. Hip injuries in particular are difficult to identify, because the symptoms of different injuries can be very similar. You should take any pain or discomfort in this area very seriously.

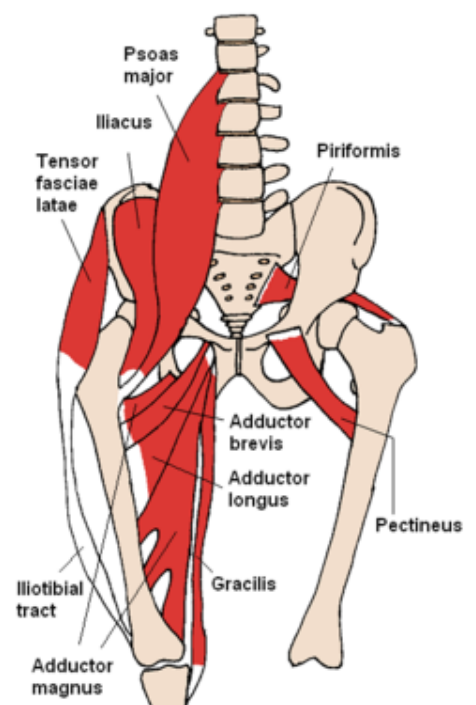
### Anatomy of the Hips

The hip is a ball-and-socket joint. The cartilage that lines the joint is called the *labrum*. There are strong ligaments attaching the pelvis to the thigh bone (*femur*) and the fluid-filled sacs that cushion the bones, tendons, and muscles of your hip joint, known as *bursae*. There are a series of oddly named muscles, such as *iliacus*, *piriformis*, and *tensor fasciae latae*, that allow a host of movements. The hips can flex and extend, abduct and adduct, and rotate internally and externally. In other words, bending the leg forwards (*flexion*), extending the leg behind you (*extension*), lifting the leg away from the body (*abduction*), moving the leg inward (*adduction*), plus internal and external rotation.



### Anatomy of the Pelvis

The pelvis is a bone structure located near the bottom of your abdomen, and is responsible for supporting your upper body. Each side of the pelvis consists of three bones: *the ilium, ischium, and pubis*. These join together at the front to form the *pubic region*. Ligaments connect the pelvis to the lower back.



## Hip Flexor Tendonitis

*Hip flexors* are a group of muscles that move the thigh forward and up. *Tendonitis* mainly occurs when your *psoas* muscle (a deep hip muscle) is overused and pulls on a tendon that attaches it to the *iliac* bone, causing the tendon to become inflamed.

**Symptoms:** You will often hear a clicking noise when walking or running. And occasionally there will also be an associated pain deep in the hip. It can even be a struggle to put your socks on.

**Cause:** The muscle of the hip flexor becomes inflamed. This can be due to muscle weakness or due to tightness in the muscle. It can also be irritated by overuse or a sudden injury, such as a fall or other type of trauma.

**Prevention:** Stretching the hip flexors, especially after long runs. Ensuring that your chair is appropriately set up if you work in an office. Strengthening exercises and core muscle work, especially for your gluteal muscles with squats and exercises like bridge pose. Foam rolling daily will help keep your hip flexors loose and relaxed and less prone to injury.

**Treatment:** Rest and possible the use of inflammatory tablets depending on how severe it is. Followed up by appropriate stretching and strengthening exercises that can be guided by a qualified Physiotherapist.

## Runner's Pelvic Pain

There are a number of possible complications to look out for related to injuries to the pelvis:

**Symptoms:** Pain and soreness in the pelvic region. Discomfort in the pelvic area when sitting, standing or walking. Bruising or swelling around the hips. Diarrhoea, bloating or constipation

**Cause:** Poor posture. Overtraining or training on rough terrain. Hip misalignment.

**Prevention:** Participate in activities that can help to improve your posture such as Yoga or Pilates. Strengthening exercises for the pelvic floor muscles. Varying the type of terrain you run on, and increasing training loads incrementally.

**Treatment:** Rest is vital with injuries to the pelvic region. You may need to take pain killers or anti-inflammatories as the discomfort can be very unpleasant. As things settle down, massage, physiotherapy, and strengthening and stretching exercises can help to get you back in to proper alignment.

## Some other potential reasons for Hip Pain:

**Stress Fracture:** Stress fracture occurs when the bone can't handle the forces placed on it or if it's weak from lack of calcium or poor bone density. **Symptoms:** pain on the front of your hip that travels to the groin, back, or leg.

**Hip flexor strain:** Usually due an abrupt increase in mileage or increase on speed. **Symptoms:** Pain near your leg crease while running and it hurts if you lie down and pull your knee to your chest. It could be hip flexor strain or an inflammation of the of a tendon. This normally occurs.

**Femoral Acetabular Impingement (FAI).** FAI occurs when the ball of the hip joint doesn't fit properly into the socket. The resulting grinding tears the cartilage lining the socket causing hip pain. **Symptoms:** An ache in the front of your hip or near your groin which worsens post-run.

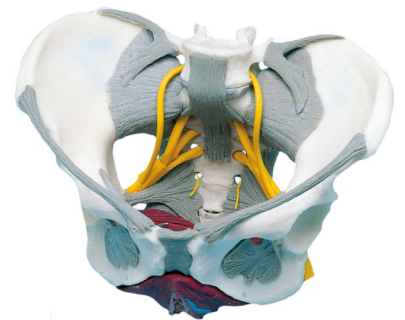
**Bursitis.** Frequent repetitive motions, such as running, put pressure on the bursa sacs, causing them to become painful and inflamed. **Symptoms:** You may feel pain or burning sensation on the side of your hip during or after your run

**Strain of the adductor muscles.** Adductors (or inner thigh muscles) pull the leg inward as it is moving forward. The faster the movement, the greater the degree of adduction. **Symptoms:** Pain along the inside of the hip (but this may also be due to **tendinitis**)

**Osteitis pubis, sports hernias, infections, pubic stress fractures, or osteoarthritis.** These are all relatively common conditions that can be difficult to identify and differentiate between without specialist examination. **Symptoms:** They are involve pain in the inner hip, and sometimes the front of the joint.

## Next Issue

In the next issue we look at getting your final preparations just right. In addition, we will give insights into possible injuries that can affect the lower back.



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