



Posture Plus Top Ten Tips

Knee Pain

1. If you do any sport with repetitive movement patterns such as running or cycling – you should always roll out the muscles of your leg using a foam or travel roller. In particular, the iliotibial band (ITB) – a long, superficial band of fascia attached to the outside edge of your knee cap (patella), may shorten and contribute to mal-alignment of your patella at rest and during movement. *“If you run, you have to roll” (See our Posture Plus Website Product Information – Travel Roller).*
2. Stretching and strengthening the muscles around your knee is important to do even if you don’t participate in any sport. For e.g. if you sit at work on average 9 hours a day with your knees bent at approximately 90 degrees the muscles that are turned “on” and may become overactive and tight are the hip flexors and knee extensors – the psoas, and quadriceps muscles. Other muscles are conversely turned “off” particularly the gluteal muscles which are held in a lengthened position when you sit. Don’t end up looking like a “chair person” when you walk or run!
3. High heels cause your centre of gravity to move slightly forward, there is more weight on your toes and less ankle stability, all of which creates more stress on your knees. *(Research has shown that there is a 26% increase in stress at the knee joint with a 2 inch heel!)*
4. Check your running shoes – they might look O.K from the outside but it is advisable to replace your runners if you can’t make out the pattern of the tread on the sole of your shoe. Your Physiotherapist will also give you advice on what types of shoes would be best suited for your foot type and movement pattern. Your Physiotherapist may refer you to a podiatrist, a specialist in foot biomechanics, if they feel your foot needs more support than your shoes are able to provide. *(See our Posture Plus Website - Running Plus Assessment information)*
5. The “ideal” lower limb alignment is as follows: the bone at the front of your pelvis (anterior superior iliac spine - ASIS), the middle of your patella and the second toe. Check your alignment the next time you go up some steps or when you are in the gym doing a lunge or squat. Any large deviation from this alignment will cause inefficient movement patterns leading to muscle imbalances over time and potentially, damage to the ligaments, cartilage and bone.
6. If you have cartilage or meniscus (a thick layer of cushioning between the thigh (femur) and shin (tibia) bones), damage in your knee, try and avoid crouching for sustained periods of time for e.g. whilst gardening, as this puts a large compression stress on the posterior aspect of the meniscus and can lead to degenerative tears. Trial glucosamine + chondritin (a natural supplement) to see if has any affect on your knee pain. *(Research has shown that these supplements have a supporting affect on the health of cartilage if taken consistently over a month and at the prescribed dose).*
7. Twisting your body while keeping your feet fixed is the classic way to injure your meniscus and wear away the cartilage covering the surface of the knee joint. Take care when you are lifting and twisting with a heavy load (avoid twisting with the foot fixed) and in sporting activities which involve this repetitive twisting movement - most notably found in golf.
8. Consider incorporating other types of low impact exercise into your fitness plan which still provide you with the aerobic health benefits but are less stressful on your knees. Sports such as swimming, walking or using a rowing machine.
9. Check your balance: Proprioception and kinesthetic awareness are important abilities which help you sense where you are in space as well as adjust to external conditions such as uneven ground. Do the balance test we use at Posture Plus to assess whether you need to incorporate specific balance activities into your everyday activities. *(See the Posture Plus Balance Test)*
10. Maintain your weight – any extra weight you are carrying now will cause further stress to your knees. You need your knees for later in life – *look after them now!*

Warning: If you feel any increase in pain or discomfort when trying the Top Ten Tips for Knee Pain – stop immediately and contact your Physiotherapist.