

Yoga For Knees

Yoga

how to heal + protect

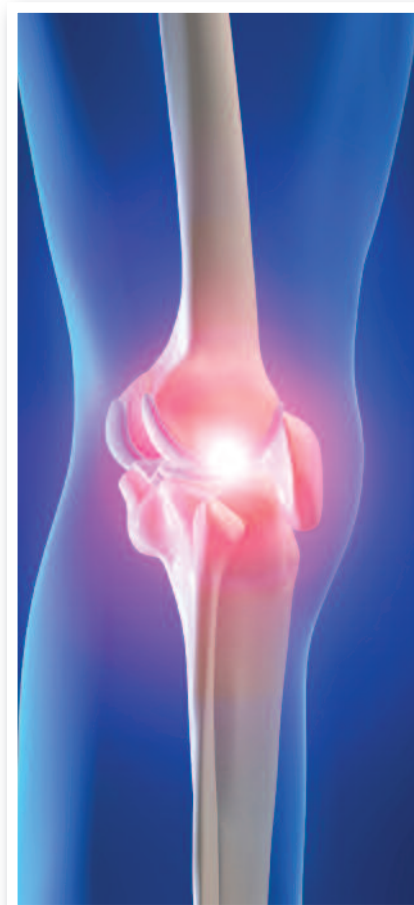
We all know that a knee injury can set us back hugely, so it's in our interest to keep this vital joint as 'healthy' as possible and by this I mean strong with good alignment of the patella, writes **Sally Parkes**. Here she tells you what to do to get your knees as fit as possible using yoga.

Yoga photo: www.aliwphotography.co.uk

Coming from a sporting background myself, I've experienced significant knees problems. After running several marathons and teaching studio cycling for several years, I got to a point where I could not bend my knees through a 90-degree angle without a lot of pain. I discovered that because I had not included stretching into my training the patella was significantly misaligned, a condition called Chondromalacia Patella. This is a common complaint - with the knee cap out of alignment there is friction under the patella which causes wear and tear on the. This misalignment is especially common in runners and cyclists as these activities significantly increase the strength of the outer quadriceps (vastus lateralis and vastus intermedius) whilst the inner quadriceps (vastus medialis) and adductors (inside of thigh muscles) don't get strengthened to the same degree. This results in increased tension of the anterior cruciate ligament and the outer quadriceps, which then encourages an external lateral misalignment of the knee cap.

Fixing your knees with yoga

So, the challenge is how do we avoid this kind of injury without causing more friction in the knee joint and how should we address the muscle imbalance without causing more damage?



A very effective method is to increase the body's overall flexibility by increasing your stretch time post workout and by practicing slow and thoughtful yoga. The hips, quadriceps, iliotibial band (band of soft tissue on your outer thigh that can restrict knee function when tight) and glutes should all be stretched in order for the connective tissue and surrounding muscle groups to have a healthy level of flexibility. This will allow the patella to sit in more effective alignment - the result being less wear and tear of the knee joint.

Effective asanas to achieve this include Baddha Konasana (Cobbler's Pose) to stretch the groin area and Eka Pada Rajakapotasana (Pigeon Pose) to stretch the glutes, especially the gluteus medius (outer glute/hip muscles) and hip flexors (muscles to top front of thigh). All the asanas should initially be supported with yoga props, in this case yoga block. A yoga block should be placed under the hips to help bring the pelvis into a more neutral alignment, this reduces tension in the knees. Do not rush these asanas and ensure you are fully warmed up beforehand. Hold each for at least a minute and breathe deeply throughout.

Strengthening the knees through Yoga

As well as improving our overall flexibility, yoga can also strengthen the knees. We do however need to pay attention to detail when doing postures that require the knee to be flexed. When

the knee is flexed, the supporting ligaments have to become loose to permit the flexion. As a result, stability is then decreased and the joint is more prone to injury. For Virabhadrasana One and Two (Warrior I and II) the knee joint should be aligned directly over the ankle as this not only helps to protect the patella tendon, but also strengthens the connective tissue that runs around and through the knee joint. More specifically the joint should be lined up over the second and third toe

wonderfully beneficial postures for those who have the necessary physical openness in the hips, they are very strong on the knee joints and require a large amount of rotation as well as flexion of the knee joint, thus putting it in a vulnerable position. If the pelvis is not flexible enough to allow the required rotation of the femur, then the knee tendons and ligaments will be put under immense tension

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so the quadriceps are equally engaged and the knee is stabilised as much as it can be when in a flexed state.

A much more stable position for the knee is in Trikonasana as the knee is extended. All its components, the head of the femur, tibia and fibula, fit together perfectly and the connective tissues are taught – this means they are in a more supportive state. This is only the case however, if the quadriceps are contracted so the patella actually moves upwards slightly toward the thigh. This indicates that the muscles are shortening during contraction, and therefore signals stabilisation. It's this attention to detail that helps to bring strength and stability to the body and is very much worth paying attention to.

Yoga Postures to avoid

As with any training programme you need to build up gradually and there are yoga asanas that most people should avoid initially. These include Supta Virasna, (Reclining Hero Pose), Gomukhasana (Cow Face Pose) and Padmasana (Lotus Pose). Whilst these are

gradually at first by working on gently opening the hips with the suggested asana so the knees do not need to flex so deeply. With patience and regular practice, the hips will open, allowing the knees to be stretched and strengthened according to the individual's abilities.

There are really just a few simple principles to bear in mind when going about your practice. Always pay attention to where your knees are and how they are feeling, especially during postures that require the knee to be flexed. Never force a yoga posture and remember that the hips have a big effect on the knees, so it is worth working on stretching these too. Eventually, with regular and considered practice your hips will feel more open, your knees stronger and your body will move more freely than you thought possible, resulting in massively improved fitness and sports performance. **UF**

Monthly Pose

Cobblers Pose (Baddha Konasana)

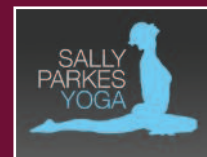
From a seated position with the spine upright, bring the soles of the feet together whilst dropping the legs out to either side. Interlace the fingers and place them under the feet. Inhale, contract the abdominal muscles and straighten the spine as much as possible before tilting the pelvis forwards so the upper body moves towards the feet. Keep the shoulders down away from the ears and breathe and move slowly. Do not strain. The elbows can rest on the inner thighs. Last of all let the head relax down.

Modifications:

If the hips or back are stiff, sit on a yoga block or rolled up towel to encourage neutral alignment of the pelvis and lumbar spine before moving into the posture.

Benefits:

Stretches the hips, psoas, adductors and lower back



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