Karuna Yoga Newsletter

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Let's Consider the Knees

During the month of November we focused on the importance of our feet. The posture of the month was Tadasana (mountain posture), which helps to strengthen the knees as we connect with the four corners of our feet.

If you've ever experienced knee pain you know how frustrating and limiting it can be. It's not unusual for yoga students to practice postures with small misalignments in the knee, which can contribute to pain and long-term joint problems. However, yoga postures practiced with good alignment of the leg bones and joints can be a wonderful tool for building strong, healthy knees.

The knee is sensitive to alignment because it is a shallow, basically unstable joint. Above the kneecap is the femur (thighbone), which also creates the hip joint. Below the kneecap is the tibia (shinbone), which also creates the ankle joint. These are attached at the kneecap by ligaments, which join bone to bone, and tendons, which join muscle to bone. Any side bending or twisting of the knee endanger these supporting tendons and ligaments. If your hips are tight, the knees tend to compensate which can result in pain, strain or heat sensations.

For example, standing postures done with improper alignment can put great strain on the knee. In Trikonasana (Triangle), for example, the front leg kneecap should point over the centre of the foot. Bent-leg standing postures can also stress the knee. As the knee bends, it should function like a hinge, with no sideways movement.

Learning proper alignment

To learn proper leg alignment, lean back against a wall, with your heels about 30cm from it. Slowly slide down the wall and as your knee bends, make sure the kneecap points straight out over the centre of the foot. Practice of this simple exercise can help train the muscles to hold the leg in proper alignment, preventing repetitive damage to the knee ligaments and cartilage during standing postures—and during everyday activities like going up and down stairs. This simple exercise also helps to strengthen the quadriceps muscles on the front of the thigh. Quadriceps strength is very important in supporting the knee joint.

If you have difficulty contracting the quadriceps in straight-leg standing postures, try this exercise. Sit on the floor with both legs stretched out in front of you and lift your foot about 3 or 4 cm off the floor. You can then feel your quadriceps activating and this will strengthen the muscle and protect your knees.

Hyperextension of the knee joint

This is where it feels like the knee is pushing back too far. When the knee is hyperextended it is in an unstable position. Hyperextended knees can arise from a combination of tight hamstrings, weak quadriceps (thigh muscle) and a weak gastrocnemius (calf muscle). Stretching and strengthening these muscles can improve this condition and prevent damage to the knee joint.

Preventing knee problems

- Focus on hip movement and correct alignment
- Use props to support the knees, legs and hips
- Never move into pain or force the knee, resulting in heat sensations
- In standing postures, shorten the distance between your feet to lessen the strain on your knees.

Posture of the Month VIRASANA (HERO POSTURE)

Regular practice of this asana helps to develop your strength and endurance. The asana stretches the chest and increases your capacity for deep breathing. Virasana relieves stiffness in the joints and improves the flexibility of your whole body.

Technique

- 1. Kneel on the floor with your knees together. Slide your feet apart, slightly wider than your hips, with the tops of your feet flat on the floor.
- 2. Exhale and sit back halfway, with your torso leaning slightly forward. Place your hands on your calf muscles and draw the muscles out and down toward the heels. Then sit down between your feet.
- If your buttocks don't comfortably rest on the floor, raise them on a block or blocks placed between your feet. Make sure both sitting bones are evenly supported.
 Beginners: place your palms on your knees and push your thighs down.
 Intermediates: raise your arms to shoulder level. Stretch them forward, interlock your fingers and turn your hands so your palms face away from you. Raise your arms until the palms face the ceiling. Keep your chest expanded and look straight ahead.
- 4. At first stay in this posture from 30 seconds to 1 minute. Gradually extend your stay up to 5 minutes.
- 5. To come out, lean forward and place your hands on the mat. Slowly lift your hips and straighten your legs coming into Downward Dog. Bend each knee in turn stretching out the back of your legs. Then bend your knees and sit back onto your heels for 30 seconds.

Contraindications and Cautions

If your toes angle out to the sides instead of pointing straight back, you're twisting and straining your knees. The foot and lower leg are rotating out while the femur is, relatively speaking, rotating in. Virasana with the feet turning out is an excessive twist, which will damage the knee ligaments. Sit on more blocks until your feet go straight back.

If you experience knee pain, place a long thin roll using a small towel or a thin bolster deep into the back of your bent knee. The roll helps to keep the bones in their natural alignment, without twisting or side bending, and keeps a little space open inside the joint, avoiding compression.

If your ankles are painful in this posture, roll up a towel or blanket and place it underneath your ankles before you sit back.

Beginner's Tip

Often the inner top feet press more heavily into the floor than the outer top feet. Press the bases of your palms along the outer edges of the feet and gently push the little toes side of the feet to the floor.

Benefits of this posture

- Relieves gout
- Eases stiffness in the shoulders, neck, hip joints, knees and groin
- Stretches the thighs, knees and ankles
- Strengthens the knees and arches of the feet
- Improves circulation in the feet
- Corrects herniated discs
- Improves digestion and relieves gas
- Helps relieve the symptoms of the menopause
- Therapeutic for high blood pressure and asthma.



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