Injury INFO-BITZ

Tight IT bands may lead to knee cap dislocations, causing the knee cap to tilt inwards or outwards. This may lead to pain and discomfort.

**stretch for the IT band.**

Stand upright and cross one foot behind the other. Then lean towards the foot that is behind the other. Hold this stretch for about 15 to 20 seconds, and then repeat it 3 to 4 times on other leg.

Also, the knee rotates with every step (called the screw-home mechanism); the thigh (femur) goes in one direction and the shin (tibia) goes in the other. In turnout, if the side of the leg is too tight, many dancers will over-rotate the knee, which can create enormous pressure even during a simple plie. In dances that require many squats or in modern dance forms that use the floor or knee turns a lot, one of the cartilage discs (meniscus) may tear.

The two menisci function as padding between the femur and the tibia, moving with the bones to allow more motion in the legs and feet. When the menisci get torn, they can roll up and get caught inside the knee, causing it to lock up or just be painful and inflamed. Fortunately, the leg can function without the menisci, so they can be partially or fully removed; but lack of a meniscus can cause arthritis later.
Overuse is a problem that can lead to patellar tendonitis, or jumper's knee, where the tendon between the kneecap and the tibia gets inflamed. Although this painful condition may take a while to resolve with rest and ice, and stretching of the quadriceps muscle once the inflammation and swelling has decreased will improve the condition. Avoiding pounding forces on the knee (such as jumping and stomping) will lessen the pain.

A patellar strap can decrease the pain by allowing the forces to be distributed evenly within the knee.

Probably one of the most serious (though not common) injuries involves the ligaments, usually the anterior cruciate ligament (ACL), which forms a cross deep inside the knee with its sibling, the posterior ligament, and keeps the femur from sliding off of the tibia. It tends to happen in ballet when landing large jumps, or in forms such as contact improvisation, in which the body twists while the foot stays in contact with the floor.

Form is everything in injury avoidance. Keep your kneecap in line with the second toe. Develop the deep postural muscles of the pelvis and leg, such as the inner thighs and hip rotators, giving equal attention to both the internal and external hip rotators. Lift the kneecap to straighten the leg instead of pushing the knee backward into hyperextension. Stretch the large muscles of the thigh, the quadriceps. Improve your balance and pelvic-side muscle coordination by standing on one leg in parallel for twenty seconds with arms crossed and eyes closed. And never forget that hamstring strength is as important as stretch.
Pilates has taken on the fitness world by storm, and it’s no wonder. Many Pilates fanatics have come out of their 8 or 12 week program looking leaner, more toned, and healthier then ever! Apart from the fantastic toned muscles that you acquire when regularly doing Pilates, it also increases your flexibility and allows you to concentrate on rejuvenating and refreshing your mind. Many dancers swear to this ultimate work out to help shape and strengthen their legs, abs and back. The following exercises can be done at a gym or at your own home, and they aim to tone and strengthen those important legs of ours!

Scissors
1. Lying on the mat, scooping your belly, raise your upper body and extend both legs to 90 degrees (straight up in the air).
2. INHALE as you lower your left leg to 45 degrees (as shown) and EXHALE scissoring legs for ten repetitions. Reverse and repeat with your other leg.

Complete 6-8 repetitions with both legs.

Single Leg Extension
1. Lying face down, pelvis and spine neutral, hands under forehead. Legs extended along mat, hip-distance apart and slightly turned out, toes gently pointed.
2. Inhale, then exhale and reach one leg off mat. Inhale and lower leg to mat.
3. Inhale, then exhale and reach other leg off the mat. Inhale and lower leg to mat.

Complete 6-8 repetitions with both legs.

One Leg Circles
1. Lie on your back, legs straight. Raise one leg and reach to the ceiling with hip flexed to 90 degrees, toes gently pointed. Arms long by sides, palms down.
2. Inhale for first half of circle, bring raised leg across midline of body, then away. Exhale for second half of circle, bring raised leg away from midline, then toward torso, pausing briefly at top of circle.
Circumduct leg 5 times in one direction, then 5 times in opposite direction.
Repeat with other leg.
NUTRITION INFO-BITZ

Ninety-nine percent of the calcium in your body is found in your bones and teeth; the other one percent circulates throughout your bloodstream and is required for normal functions such as muscle contractions and blood clotting. If you neglect your calcium intake on a regular basis, you run a greater risk of suffering from stress fractures during your dance career and osteoporosis when you are older.

Am I At High Risk For Bone Problems?
If members of your family suffer from osteoporosis, if you smoke or consume excessive amounts of caffeine, or if you are naturally petite, you may be at high risk for having low bone mass. Regular exercise and strength training will help increase the density of your bones. However, while bones benefit from the protective effect of dancing, exercise will not totally compensate for a lack of dietary calcium. If you notice that you have brittle nails, early signs of tooth decay or aching joints, you may be deficient in calcium. During dance tryouts, it might be natural to experience muscle cramps from exertion or insomnia from nervous jitters—yet these are additional signs of potential calcium deficiency. To help determine whether the stresses of the season are masking some of these symptoms, simply ask yourself if you are eating three servings of dairy products daily.

What Are The Best Sources Of Calcium?
By daily consuming 300 calories of calcium-rich foods, such as yogurt, skim milk, broccoli or pudding, you can supply your teeth and bones with the 1,200 mg of calcium needed to help prevent stress fractures today and osteoporosis in the future. Dairy products are the best sources of calcium and of the many other important vitamins and minerals crucial for bone health, such as phosphorous and vitamin D. If you are lactose intolerant or vegan, you may want to include lactose-reduced dairy products, non-dairy foods such as calcium-rich tofu, calcium-fortified orange juice, broccoli and other leafy greens, or even a supplement containing calcium carbonate or calcium phosphate—two forms of calcium that are easily used by the body.

The Last Meal
In order to allow your body to absorb and use the calcium you consume optimally, do not eat dairy products during a meal with grains or iron-rich foods, like spinach. Spread out your calcium consumption over the course of the day, with no more than 500 mg at a time. Finally, to calm those nerves the night before your tryout, drink a glass of milk. Not only will it help you get to sleep, but researchers suggest that the best time to consume calcium is right before bed.

Source: http://www.dancespirit.com/backissues/feb02/nutrition101.shtml