

Preventing Knee Injuries in Runners



Running has its obvious benefits: It can help you lose weight, it increases good cardiovascular health and it's also a great way to relieve stress. But along with all the pros can come a few cons, mostly involving injury. And the most easily injured part of the body? The knees.

It makes sense. The knees are by far the largest and most complicated joint in the body and we use them for just about everything - from standing up to running. This weight-bearing joint has a fantastic range of motion and allows our bodies to straighten, bend, twist and even rotate. But with such a large range of motion, the knees are susceptible to injury. Here are the most common injuries and how you can prevent them.

KNEE INJURIES

Overuse knee injuries: This type of injury can develop over time and is very common in runners. It occurs when muscles and tendons become stressed and lead to microscopic tears. The tears become inflamed and pain will increase. Includes muscle strain, tendonitis and bursitis.

Knee osteoarthritis: More common in older runners. This form of arthritis involves the degeneration of cartilage. Exercise and pain medications may be used to treat and maintain

strength and flexibility of the muscles supporting the knee.

Patellofemoral pain or anterior knee pain: Also known as Runners knee, this pain is felt behind the kneecap and typically feels worse after running, climbing, or even long periods of sitting.

Dislocating kneecap: A dislocation can lead to chronic knee pain. Physical therapy and strengthening exercises can help treat this injury.

Plica syndrome: This syndrome occurs when there is an irritation of the lining of the knee joint. This irritation can cause inflammation and cause a lot of pain.

PREVENTION

Now that you know what kinds of injuries affect the knee, what can you do to prevent them from happening to you? Here are a few tips that can prevent injury before a minor inconvenience becomes a burden.

1. Warning signs: If you have any knee pain, stop what you are doing! Let an injury be a warning from your body to change the exercise you are doing. Talk to a doctor if the pain worsens to make sure nothing serious has occurred.

2. Stretch and stretch: Then, stretch some more! Be sure to stretch for 10 to 15 minutes before AND after a run. We are all busy and many runners skip out on stretching or cut their stretches short. But isn't 15 minutes worth an injury-free future? Focus on quadriceps, hamstring, iliotibial band (ITB) and gluteal muscles, and make sure to hold stretches for 30 seconds.

3. Don't rush it: If you are a runner who is trying to increase mileage, take it slowly and incorporate rest days into your schedule. You can't get ready for a marathon overnight so remember that you have to push your body's limits gently. If you push yourself too hard and too fast, you just might tear something and take your mileage down to zero.

4. The right fit: The right shoes make all the difference in running. Technology has advanced so that shoes take into account a person's arch, imbalances, heel type, width and more. Make sure you get fitted and find a shoe that suits

your needs.

5. On the road again: Running on pavement is hard on your knees so, if you can, opt for surfaces like dirt trails or grass. Be sure to avoid running down hill if you can. A track or treadmill is also an acceptable surface to run on.

6. The total package: The leg is made up of many different muscles, so it's important not to focus just on running muscles which are located more in the front of the legs. Be sure to add in some strength-training exercises to increase muscles and prevent injury. [See quad exercises below.]

QUADRICEPS EXERCISES

Here are a few exercises that will strengthen the muscles surrounding your knee and aid in the prevention of knee injuries.

Leg lifts (standing): Stand with your back against the wall. Lift one leg up as high as you can but keep the knee straight. Hold for 5 seconds, bend your knee to relax and hold for another five seconds. Do five sets before switching to the other leg.

Foot turns: Try this move lying down or sitting in a chair. Stretch both legs out with your knees straight and feet pointed up. While tightening your thigh muscles, turn your feet out as far as you can and hold for 10 seconds. Next, turn your feet in as far as you can and hold for 10 seconds. Try three sets and be sure to keep your muscles tight the whole time.

Foot press: This move can also be performed lying down or sitting. First, put one foot on top of the other. Pull up with your lower foot while pushing down with the upper foot. Hold for 10 seconds, then repeat with the other foot. Do five sets of this exercise.

DON'T RUN AWAY

Don't let the possibility of knee injury turn you off from the joy and benefits of running. Prevention is key so be sure to use your head before your feet and enjoy a long future of enjoyable running. ■

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