Female runners frequently experience pain near the kneecap, or patella. This is often due to a condition called patello-femoral pain. It is fairly common, affecting athletes of both genders; however, female runners seem particularly susceptible. Symptoms include pain near the lower, medial aspect of the patella, which occurs during and/or after running. Commonly, pain is worse when going down stairs.

The patella is encompassed by the lower portion of the quadricep muscle on the front of the thigh. The undersurface of the patella has a ridge which rides in a corresponding groove on the end of the thigh bone, or femur. When the knee bends, the patella should glide back and forth in the groove on the femur, like a train on a track. With patello-femoral pain, there is often a disruption of the smooth gliding, or tracking.

There are several likely causes of altered tracking of the patella. An imbalance in the strength and flexibility of the muscles surrounding the knee may be to blame. In runners with patello-femoral pain, the muscles on the front and side of the thigh (vastus lateralis and IT band) are often stronger and less flexible than the smaller muscles (VMO) near the medial thigh. Since the patella is intricately related to these muscles, the larger, outer muscles may pull the patella sideways, slightly off track.

This problem may be exacerbated in women due to the fact that the track itself (femur) is not in an optimal position. Women often have wider hips, resulting in a larger angle at the knee. It is also common to find relatively weak hip muscles in female runners. The hip muscles attach to the top of the femur, and the knee is located at the other end. Therefore, poor control from the hip muscles can cause faulty mechanics at the knee.

While we can’t change the way we’re put together, we can make the most of what we have. Prevention includes a thorough stretching and strengthening routine, especially for those neglected hips. Cross training is also important; rollerblading is a great activity to work a runner’s underused hip muscles.

Symptoms that don’t resolve or change within 10-14 days should be examined by a physician, who may recommend physical therapy. A physical therapist will perform a thorough evaluation to determine which muscles should be stretched or strengthened, in order to get you back “on track.”