PATELLAR TENDONITIS
(Jumper's knee)

To fully understand "jumper's knee" (patellar tendinitis), and what causes it, it is important to understand that it is only one part of a larger structure: the "extensor mechanism". The term "extensor mechanism" of the knee refers to the mechanical chain that allows you to straighten (extend) your lower leg. This chain consists of three key structures: the thigh muscle (quadriceps or quad muscle), the knee cap (patella) and the patellar tendon. These are connected together in the order presented. The extensor mechanism begins at the top of your thigh and ends where your patellar tendon attaches on the upper portion of your shin bone (tibia).

When your quad muscle fires (contracts), it signals the patellar tendon to extend the lower leg. The kneecap sits between the quad muscle and the patellar tendon and acts as a fulcrum to facilitate knee extension.

Patellar tendinitis is an inflammation of the tendon between the kneecap and its attachment on the tibia (lower leg bone). It is most common in younger athletes participating in jumping and landing sports. If you develop patellar tendinitis, you will usually feel pain directly below the kneecap in a localized area.

It is caused by repetitive microtrauma to the patellar tendon. When jumping, the forces that pass across the patellar tendon can be in the neighborhood of fifteen times your body weight. Repetitive jumping can eventually cause small, microtears of the tendon. This results in difficulty jumping, and ascending/descending stairs.

The vast majority of patellar tendonitis cases resolve with conservative (non-surgical) treatment. Rest, icing the knee, taking an anti-inflammatory medication and wearing a patellar tendon strap (can be purchased at sporting goods and drug stores) may resolve your symptoms completely. Should symptoms persist longer than two to three weeks, consult a sports medicine trained physician, who may add physical therapy to your treatment regimen. Physical therapy will help heal the tendon and recondition the entire extensor mechanism to allow you a safe, pain-free return to sports. Chronic cases which persist for several months or more may require arthroscopic surgery, but this is certainly the exception and not the rule.

You may continue to participate in your sport while treating patellar tendinitis using your symptoms as a guideline for play.