



Prevent ACL INJURIES — & — Keep JOINTS STRONG

Knee injuries at a young age can lead to Osteoarthritis (arthritis) of the knee later in life. In fact, up to half of all people with an anterior cruciate ligament (ACL) or meniscus (shock-absorbing cartilage or knee tissue) tear will get arthritis 10 -20 years later. Youth that participate in sports like girls' soccer, football, and girls' basketball have an increased risk of knee injuries.

What is Osteoarthritis?

Osteoarthritis (OA) is the most common kind of arthritis, so it is frequently just called "arthritis". It is defined by wearing down of a tissue in the joint called cartilage. Arthritis of the knee causes knee pain and difficulty climbing stairs. Over time, arthritis of the knee can make it difficult to walk.

Exercises That Can Help Prevent Injury & OA

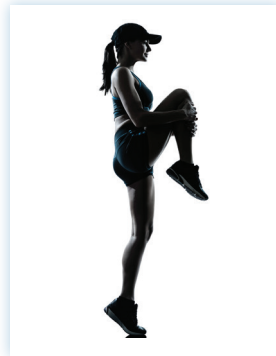
Knee injuries, such as ACL injury, can lead to arthritis. A good training program can reduce the chance of knee injuries by up to 50% and may help prevent injury-related knee arthritis. It just takes 15 minutes, 2 to 3 times each week to do the following activities:

Warm-up exercises ■ Balancing exercises ■ Sports skills ■ Strength training, including jumping exercises



Stretching

3 to 4 exercises that stretch the leg muscles



Balance

2 to 3 exercises to improve balance



Warm Up

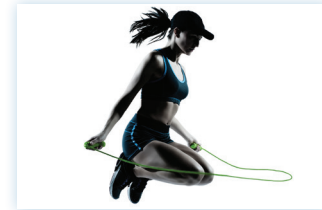
2 to 3 exercises to get your athlete moving, like side shuffle, high knee skipping, forward-backward jogging



Strengthening

2 to 3 exercises to strengthen muscles around the joints, like squats, planks, lunges, push-ups

Training programs that reduce knee injuries can also improve leg strength, power, balance, and performance.



Jumping

5 to 6 jumping exercises – or plyometrics – like single leg jumps or ladder drills

Athletes: Beat OA and Your Opponents

The same exercises that help you prevent knee injuries and arthritis also improve your:

- vertical jump height
- hop distance and speed
- aerobic fitness
- sprint speed
- lower leg strength and balance

Parents: Get Involved

Parents and guardians can play an important role in preventing knee injuries.

- Ask the coach if injury prevention practices are incorporated into training plans
- Make sure the playing field is safe and rules are followed
- Ask if the team has access to an athletic trainer

Coaches: Encourage Good Techniques

Be sure to give your athlete regular feedback on form during their exercises. Remind your athlete to:

- Keep knees over toes
- Bend at knees and hips to land softly
- Keep toes pointing straight ahead
- Be sure to stay educated in proper technique and consult an athletic trainer with questions



Some free training programs that have been studied by researchers include:

PEP Program: <http://smsmf.org/smsf-programs/pep-program>

11+ Program: <http://f-marc.com/11plus/home/>

PEAKc Program: <http://www.unc.edu/depts/exercise/peak/peak/Home.html>

For more information, visit <http://oaaction.unc.edu>