

AVOIDING THE SOCCER CURSE

New training program can help keep your kids' knees injury-free

BY MIKE HAYAKAWA
Staff Writer

Your children love soccer and you like to watch them play, but for all its positives, the sport has a downside you probably haven't considered.

It's called osteoarthritis. Known as the most common form of arthritis, osteoarthritis can be generated from knee injuries, specifically, ligament tears known as ACL injuries.

Unionville doctor James Carson, chairperson of the Canadian Academy of Sport Medicine's safety committee, said it's a growing problem, particularly among female players between ages 14 and 18.



STAFF PHOTO/SJOERD WITTEVEEN

Jennifer Johnston, a York Region athletic therapist/acupuncturist, helps Unionville/Milliken soccer players Liana Tomé (left) and Shae Culleton, both 18, train to prevent knee ligament injuries.

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other common injury connected to osteoarthritis to the same degree."

Just how to prevent ligament tears is a hot topic among those who treat sports injuries.

"Up until two years ago, we didn't have knowledge on how to prevent an ACL injury," Dr. Carson said. "We need to tell soccer coaches there's new stuff (medical information) out there now to keep these injuries from happening."

Earlier this year, Dr. Carson and Jennifer Johnston, an athletic therapist and acupuncturist working with him at the Sports Med North Clinic in Unionville, introduced a

preventive program. The pair has used it with Markham and Unionville-Milliken teams.

The Prevent Injury, Enhance Performance (PEP) program is a 15 to 20-minute training session replacing traditional warm-ups.

Comprised of six steps — avoidance, flexibility, strengthening, plyometrics, agility and cool down — Ms Johnston's initiative is a refined version of a two-year-old American program.

She recommends her program be done prior to the start of practices and run two or three times a week.

"It's an easy program and can be made fun," she said.

While the program is in its infant stages, Ms Johnston noted encouraging feedback from coaches using it.

"The interest is definitely out there. The whole idea is to implement strategies so people will reduce the chances of getting injured. These things can lead to changes in their life," she said.

For more information on the program, Ms Johnston or Dr. Carson can be contacted at 905-477-0027.



Fitness Files

Amanda Mashinter

Mix exercises with your walks

Regardless of whether you're already active or just starting out, why not use the long summer days to kick start a fitness program with these fun and easy tips that leave you looking good and feeling great?

Walk your way to shapely legs and buttocks. Walking is one of the best forms of exercise because it's inexpensive and in the lazy days of summer it can propel you through parks, hikes and splendid scenery.

How much is enough? We benefit best from a minimum of three to four cardiovascular conditioning sessions per week. Build up from 15 minutes to 45 minutes or more. Work at a level where you feel sweaty and short of breath.

• Circuit in the park: On one of your walks, add in the three upper-body strength exercises described below. Walk for 10 minutes, then do the exercises. Walk for 10 minutes more and do a second set. If you're feeling strong, walk for 10 more minutes and perform a third set.

• Park bench push-ups: Place your hands shoulder-width apart with your chest lined up with the backrest of a bench. Lower your chest to meet your hands (keep your back long and your abs engaged), then push back up.

• Playground pull-ups: Find a playground with straight bars. Your feet must touch the ground on this one so if the bar is close to the ground that's OK. Place your hands shoulder-width apart, palms in an underhand grip on the bar. Jump up so you are hanging at or above the chin level with the bar, then slowly lower yourself down to straight arms (not locked) before placing your feet back on the ground.

• Park bench tricep dips: Sit on the edge of a bench with your behind just at the edge. Position your feet below your knees (at a 90-degree angle). Place hands at sides, fingers overhanging the edge of the bench and body weight on your hands. Slip your behind off the edge and lower your body until you dip about a foot or so, then push back up.

Our weekly strength training regime doesn't have to be time-consuming if we work hard on each set.

Do each set of exercises until technique fails or fatigue sets in. As you get stronger, make sure you do more repetitions.

Amanda Mashinter is fitness manager and an elite trainer at Good Life Fitness Club in Aurora.

Focus on avoidance, flexibility, strengthening

So what does a PEP (Prevent Injury, Enhance Performance) program involve?

The idea is to reduce the risk of knee injuries suffered by soccer players (or any activity involving sudden stops or changes in lateral movements), said Jennifer Johnston, a certified athletic therapist and acupuncturist.

Adapting from a U.S. initiative, Ms Johnston has created a version that is relatively quick to do.

Just as important, she has tried to incorporate the element of fun. This is her program:

AVOIDANCE

In this step, the focus is on proper running techniques (hip/knee/ankle aligned and feet should not whip out to the sides).

1. Jog line to line (cone to cone). Complete a slow jog from near to far sidelines. Time 30 seconds.

2. Shuttle run (side to side). Starting with a slight bent knee, lead with right foot and push off with left, switch sides at half

the field. Time 30 seconds.

3. Backwards running from sideline to sideline; landing on toes and avoid snapping knees back. Time 30 seconds.

FLEXIBILITY

Stretching will improve your range of motion, overall performance and reduce stiffness and injury.

Five suggested areas are: calves (30 seconds x two reps); quadriceps (30 seconds x two reps); hamstring (30 seconds x two reps); inner thigh (30 seconds x two reps); hip flexor (30 seconds x two reps).

STRENGTHENING

It is important to increase leg strength to create a more stable knee joint. Technique is important.

1. Walking lunges: lunge forward leading with your right leg, push off your right leg and lunge with your left. Drop your back knee straight down, avoid your knee from caving in and you should see your toes on your lead leg (three sets x 10 reps).

2. Russian hamstrings: kneel on ground and have a partner hold your ankles down firmly. Lean forward from the hips (do not bend at waist, three sets x five to 10 reps).

3. Single toe raises: slowly raise, and lower on right toes with good balance (two sets x 30 reps). Repeat on left leg.

PLYOMETRICS

These are explosive exercises designed to build power, strength and speed. The important element is making sure the landing is soft.

1. Lateral hops over a cone (20 reps).
2. Forward/backward hops over a cone (20 reps).
3. Single leg hops over a cone (20 reps).
4. Vertical jumps with header (20 reps).
5. Scissor jumps (20 reps).

AGILITY

1. Shuttle run: starting at the first cone, sprint forward to the second cone, run backward to the third cone etc. (done for

one minute).

2. Diagonal run: face forward and run to the first cone on the left. Pivot off the left foot and run to the second cone etc. Make sure the outside leg does not cave in. Do three passes.

3. Bounding run: starting on the near sideline, run to the far side with your knees up toward chest. Bring your knees up high. Land on the ball of your foot with a slight bend at the knee and a straight hip. Increase the distance as this exercise becomes easier. Done for 44 yards (sideline to sideline).

COOL DOWN

1. Bridging (30 reps each side).
2. Abdominal crunches (two reps x 30 seconds).
3. Knees to chest (two reps x 30 seconds).
4. Figure four stretch (two reps x 30 seconds).
5. Butterfly stretch (two reps x 30 seconds).