



# EXERCISE PACKAGE

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## **PREVENTION OF ANTERIOR CRUCIATE LIGAMENT INJURY WITHIN WOMEN'S FOOTBALL – AN EXERCISE PACKAGE**

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# Using the package:

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This exercise package contains 20 exercises in total;

- 6 flexibility exercises
- 6 muscular fitness exercises
- 8 neuromuscular exercises

The 6 flexibility exercises should be used as part of a sport specific warm-up before every game and training session.

The muscular fitness and neuromuscular exercises should be performed only during training sessions.

Select 2-3 exercises from each of the sections and incorporate them into your session.

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# Knee position

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All exercises in this program should be performed with the correct knee alignment. Do not let your knee buckle inwards during the exercises. The pictures below show the correct (green) and incorrect (red) way of performing the movements.



# Flexibility exercises

## Hip in



**Starting position:** Begin standing on the touchline.

**The exercise:** Jog for 3 paces, stop and lift your knee to the side. Rotate your knee forwards and put your foot down. Jog 3 more paces, repeat exercise on the other leg. Repeat until you reach the opposite touchline. 2 sets.

### REMEMBER!

Keep the supporting leg straight and do not let the knee buckle inwards. Keep pelvis horizontal and do not let it tilt to the side.

## Hip out



**Starting position:** Begin standing on the touchline.

**The exercise:** Jog 3 paces, stop and lift your knee forwards. Rotate your knee to the side and put your foot down. Jog 3 more paces, repeat exercise on the other leg. Repeat until you reach the opposite touchline. 2 sets.

### REMEMBER!

Keep the supporting leg straight and do not let the knee buckle inwards. Keep pelvis horizontal and do not let it tilt to the side.

## Knee lifts



**Starting position:** Begin standing on the touchline.

**The exercise:** Jog forward on the toes while performing alternating high knee lifts. Continue until in line with the centre mark. 2 sets. Alternate sets with heel kicks.

### REMEMBER!

Keep the leg in contact with the floor in a straight line and do not let the knee buckle inwards.

## Heel kicks



**Starting position:** Continue from the centre mark after the knee lifts.

**The exercise:** Jog forward on the toes while alternating flicking of the heels towards the buttocks. Continue until the touchline is reached. 2 sets. Alternate sets with knee lifts.

### REMEMBER!

Do not flick the heels to the sides. Make sure they remain in a straight line.

## Running and jumping



**Starting position:** Begin standing on the touchline.

**The exercise:** Run forward for 5 paces and then jump into the air. Land gently and repeat until the opposite touchline. 2 sets.

### REMEMBER!

Take off with alternating legs and land gently without letting the knee buckle inwards.

## Leg swings



**Starting position:** Stand with feet hip-width apart, loosely hold on to your partner.

**The exercise:** With the opposite leg to the balancing hand, swing the leg in front and the behind. Repeat 10 times and then change sides. 2 sets.

### REMEMBER!

Keep the body straight and ensure the movement comes from the hip.

# Muscular fitness exercises

## Lunge walk



**Starting position:** Stand with feet hip-width apart, hands on your hips.

**The exercise:** Step forward slowly. Bend hips and knees slowly until your leading knee is flexed to 90 degrees and the rear leg is approximately 1-2cm off of the floor. The front knee should not extend beyond the toes. Push off with the leading leg and return to the start position. Repeat on the other leg. 10 lunges on each leg. 2-3 sets.

### REMEMBER!

Do not let your knee buckle inwards. Keep upper body straight and pelvis horizontal.

## Half squats with added toe raise



**Starting position:** Stand with feet hip-width apart, hands on your hips.

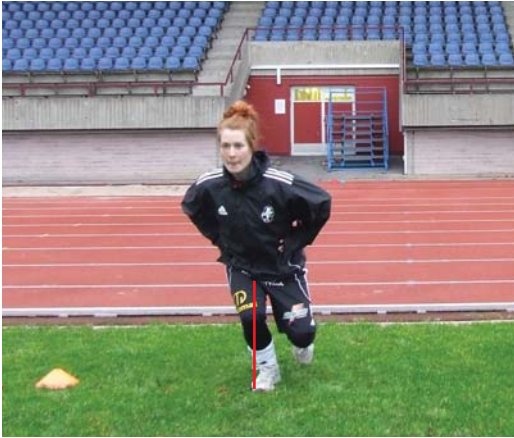
**The exercise:** Slowly bend hips, knees and ankles while pushing the buttocks backwards. Continue until your knees are flexed to 90 degrees. Lean your upper body slightly forwards. Then quickly straighten your upper body, hips and knees, and rise up until you are standing on your toes. Repeat for 30 sec. 2-3 sets.

### REMEMBER!

Do not let your knee buckle inwards. Lean upper body forward with a straight back.



## Single leg squats



**Starting position:** Stand on one leg, loosely hold on to your partner if balance is an issue.

**The exercise:** Slowly bend hip, knee and ankle while pushing the buttocks backwards. Attempt to continue until your knee is at 90 degrees, quickly return to start. Repeat on the other leg. 10 squats on each leg. 2 sets.

### REMEMBER!

Do not let your knee buckle inwards. Keep upper body facing forward and pelvis horizontal.

## Overhead squat (*wooden stick*)



**Starting position:** Stand with feet hip-width apart, arms in line with the ears above the head, hands as close to the end of the stick as possible.

**The exercise:** Slowly bend hips, knees and ankles until your knees are flexed to 90 degrees. Lean upper body forwards, while keeping the stick in line with the shoulders and hips. Then straighten upper body, hips and knees. Repeat for 30 sec. 2-3 sets.

### REMEMBER!

Do not let your knee buckle inwards. Lean upper body forward with a straight back.

## Russian hamstrings



**Starting position:** Kneel with knees hip-width apart; partner uses both hands to pin your ankles firmly to the ground.

**The exercise:** Keeping the body straight from the knees to shoulders, slowly lean forward. When you can no longer hold the position, fall into a press-up position, gently breaking your fall with your hands.  
7-10 repetitions. 2 sets.

### REMEMBER!

Maintain a steady pace throughout the movement.

## Plank



**Starting position:** Lie on your front, support your upper body on your forearms and use your toes for lower body balance. Keep your elbows directly under your shoulders.

**The exercise:** Push off the floor until your body is in a straight line from head to foot. Tense the stomach and gluteal muscles and hold the position for 20-30 sec. 3 sets.

### REMEMBER!

Do not sway or arch your back.  
Do not move your buttocks upwards.

# Neuromuscular exercises

## Vertical jumps



**Starting position:** Stand with your feet hip-width apart, hands on your hips.

**The exercise:** Slowly bend hips, knees and ankles while pushing the buttocks backwards. Continue until your knees are flexed to 90 degrees. Lean your upper body slightly forwards. Hold this position for 1 sec. then jump as high as you can and straighten the whole body. Land softly on the balls of your feet. Repeat for 30 sec. 2-3 sets.

### REMEMBER!

Jump off both feet. Land gently on the balls of both feet with your knees bent.

## Jumping split squats



**Starting position:** Stand with your feet hip-width apart, hands by your sides.

**The exercise:** Jump in the air slightly while moving one leg forward and the other leg backwards; swing the opposite arm across the body. Drop into a lunge and bend hips and knees until your leading knee is flexed to 90 degrees. Hold this position for 1 sec. then jump up and switch legs and arms in the air. Drop again into the lunge position. Repeat 10 times. 2-3 sets.

### REMEMBER!

The bent knee should not extend beyond the toes. Do not let the knee buckle inwards.

## Forward and backward hops



**Starting position:** Stand on one leg. Bend hips, knee and ankle slightly and lean upper body forwards.

**The exercise:** Jump from your supporting leg approximately 1 m forwards. Land gently on the ball of your foot and bend your hips, knee and ankle. Hold this position for about a second and then jump backwards. Land gently on the ball of your foot and bend your hips, knee and ankle. Hold this position for about a second. Repeat for 30 sec. 2 sets per leg.

### REMEMBER!

Do not let your knee buckle inwards. Keep upper body stable and facing forward and pelvis horizontal. Do not land with straight leg.

## Lateral hops

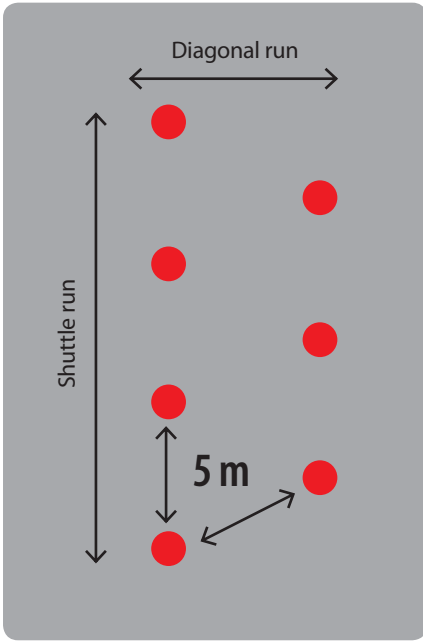


**Starting position:** Stand on one leg. Bend hips, knee and ankle slightly and lean upper body forwards.

**The exercise:** Jump from your supporting leg approximately 1 m to the side. Land gently on the ball of your foot and bend your hips, knee and ankle. Hold this position for about a second and then jump back to the starting position. Repeat for 30 sec. 2 sets per leg.

### REMEMBER!

Do not let your knee buckle inwards. Keep upper body stable and facing forward and pelvis horizontal. Do not land with straight leg.



## Running cone layout

For the running exercises cones should be placed 5 m apart as shown in the field setup.

## Shuttle run



**Starting position:** Stand on the touchline, hands by your sides.

**The exercise:** Run in a straight line forwards until you reach the first cone. Bend the knees, keep the centre of gravity low and quickly change direction to face the start position. Return to the start and repeat to the second cone. Repeat for 6-8 cones. 2-3 sets.

### REMEMBER!

Make sure you keep your upper body straight. Your hip, knee and foot are aligned. Do not let your knee buckle inwards.

## Diagonal run



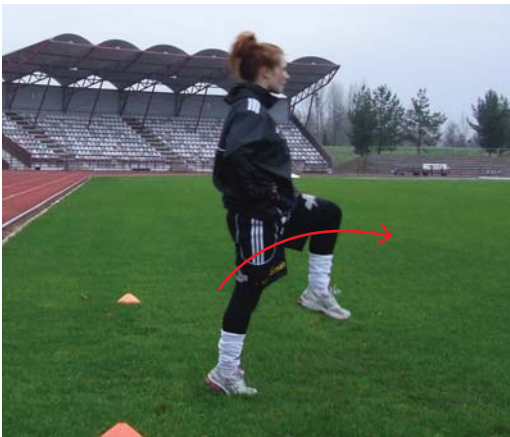
**Starting position:** Stand on the touchline, hands by your sides.

**The exercise:** Run in a straight line forwards until you reach the first cone. Bend the knees, keep the centre of gravity low and quickly change direction to face the second cone. Repeat until the final cone. Jog back to start. 2-3 sets.

### REMEMBER!

Make sure you keep your upper body straight. Your hip, knee and foot are aligned. Do not let your knee buckle inwards.

## Bounding run



**Starting position:** Stand on the touchline with your feet hip-width apart, hands by your sides.

**The exercise:** Lift the knee of the leading leg as high as possible and swing the opposite arm across the body. Keep your upper body straight. Land on the ball of the foot with the knee bent and spring into the next step. Jog back easily to start to recover. 6-8 repetitions. 2-3 sets.

### REMEMBER!

Do not let your knee buckle inwards.

## One leg standing



**Starting position:** Stand on one leg, at arm's length from your partner.

**The exercise:** Keep balance while you and your partner in turn try to push the other off balance in different directions. Continue for 30 sec. and then repeat on the other leg. 2-3 sets on each leg.

### REMEMBER!

Do not let your knee buckle inwards. Keep pelvis horizontal and do not let it tilt to the side.

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