



Svensk  
Innebandy

# KNEE CONTROL+

A development of the Knee Control programme

# Introduction

## The Knee Control training programme

The Knee Control programme was developed in 2005 and aims to prevent injuries and improve sport performance. The first Knee Control prevention trial, carried out in collaboration between Linköping University, the Swedish Football Association and Folksam, showed that female adolescent football players, 12-17 years old, who used the programme reduced the risk of severe knee injury (anterior cruciate ligament injury) by 64%.<sup>1</sup> Following efforts to disseminate Knee Control nationwide the number of football related injury insurance claims for acute knee injuries via Folksam's player insurance decreased by approximately 20% between 2011-2015.<sup>2</sup> In youth handball players, 15-19 years old, participating in handball profiled high-schools, the risk of knee injury was reduced by 31%, and substantial knee injury by 39%, among those who used Knee Control.<sup>3</sup>

## Knee Control in floorball

Knee Control has also been evaluated in a study of adolescent floorball players, 12-17 years old. In one season, the risk of acute injuries decreased by 45% among players using the programme.<sup>4</sup> Players who used the programme most diligently had the greatest injury risk reduction, stressing the importance of adherence to the injury prevention training.<sup>5</sup> The study was led by the SWIPE research group at Linköping University in collaboration with the Swedish Floorball Federation and the Floorball Development and Research Centre, Umeå.

## Development of Knee Control+

Knee Control+ was developed from Knee Control to accommodate requests from many coaches for more variety of exercises and customization of exercises based on player age and playing level. Knee Control+ includes more exercise variants with both easier and more challenging exercises, thus providing increased opportunity for the coach to select the right exercises for their team. We have also added exercises that specifically aim to prevent muscle and tendon injuries (sprains/tears), which are more common among older players.

The Swedish Floorball Federation recommends that children and adolescents start with the exercises at an early age, focusing on easier exercise options and exercises with playful components, and to incorporate the full programme from the age of approximately 10-12 years. It is important to make the injury prevention training part of normal floorball practice at an early age and continue to do the exercises regularly throughout the career.

Knee Control+ has been developed and tested by the SWIPE (Sport Without Injury Programme) research group at Linköping University together with experienced sport physiotherapists. In a prevention trial in youth and adult football players, 14 years and older, teams who used Knee Control+ had a 29% lower injury risk than teams who used self-selected injury prevention exercises.<sup>6</sup>

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if you have any questions about Knee Control+.

Warm-up

0

Squats

1

Lunges

2

Jump/  
landing

3

Core  
strength

4

Hamstring  
strength

5

Groin  
strength

6

Training  
set-up  
examples

7

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The research group Sport Without Injury Programme (SWIPE) at Linköping University has developed and conducted research on Knee Control and Knee Control+ with generous support by grants from the Swedish Research Council, the Swedish Research Council for Sport Science, and the Swedish Research Council for Health, Working Life and Welfare. The Floorball Development and Research Centre is a collaboration between the Swedish Floorball Federation, Umeå University and Umeå municipality. The aim of the research centre is to develop and support Swedish floorball through research and development.

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Warm-up  
0Squats  
1Lunges  
2Jump/  
landing  
3Core  
strength  
4Hamstring  
strength  
5Groin  
strength  
6Training  
set-up  
examples  
7

## Overall set-up of Knee Control+

**Warm-up (activation)** is done before every training session and match: approximately 5 minutes. Many exercises can also be performed with the stick and ball.

**Knee Control+ exercises** can be carried out before every training session as part of the warm-up for **10-15 minutes** but can also be incorporated into the training session or carried out after the training if this suits the team's training set-up better. Exercises 4-6 (focusing on strength) are particularly suitable toward the end of the training session or can be carried out outside floorball training (at home or at the gym). Note: follow the recommended dosage and frequency of strength exercises (**2-3 times per week**) even if done separately from the floorball training.

**Dosage:** The programme consists of **6 basic exercises**, each carried out for **30-60 seconds** (approximately 8-15 repetitions per exercise) in **2 sets**. Players should be tired from the exercises but able to complete them with proper technique.

There are 10 variants for each basic exercise. For practical reasons, the whole team can do the same exercise variant, but individual adaptations can be made, if suitable.

**Apply proper technique in all exercises:** knee and foot in the same direction during squats, lunges and jump/landing, good core control, feet hip-width apart and soft controlled landings. The programme also includes tips on how you as a coach can instruct the players in various exercises.

Warm-up

0

Squats

1

Lunges

2

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landing

3

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strength

4

Hamstring  
strength

5

Groin  
strength

6

Training  
set-up  
examples

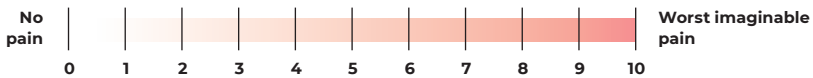
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## Choosing exercises

1. **Include a variant of all six basic exercises** (squats, lunges, jump/landing, core strength, hamstring strength and groin strength).
2. Choose exercises with proper difficulty; exercises should be challenging but players should be able to complete the exercises with proper technique. The exercises are described in a range from easy to more challenging. Pair exercises and resistance band exercises are not necessarily more difficult than the individual exercises but can be included for variety.
3. We have added a note for each exercise variant to indicate if it is suitable for an easy, medium or advanced level. Note: these are approximate indications, try different levels to find out which one is best for you. We have also given suggestions for easy, medium and advanced level training set-ups.



4. Choose an easier exercise if players cannot complete the exercise using the correct technique for the time/number of repetitions indicated.
5. Choose an easier exercise if, when doing the exercises, the players experience pain corresponding to  $>3$  on a scale of 0-10 (where 0 is no pain and 10 is the worst imaginable pain), see figure below.



6. If you as a coach want more focus on building strength, we recommend you choose heavier exercise variants such as 4G-H (core), 5H (hamstrings) and 6I (groin). Some of these high-load exercises can be done more frequently in the pre-season (**build-up period**) and then less frequently in the competition season (**maintenance training**), e.g. once a week.
7. Use **resistance band exercises** as a variation to work more with muscles of the hip, gluteals and groin.

## CORRECT AND INCORRECT EXERCISE EXECUTION

### Two-legged squat /landing

Whole feet on the ground, knees point straight forward/ slightly outward, not inward.



### One-legged squat /landing

Foot and knee point in the same direction, hips straight and stable.



### Lunges

Feet shoulder-width apart, body moves straight up and straight down, body held upright and without leaning sideways.



### Groin strength

Copenhagen adduction. Keep your body straight. Keep your backside tucked in and do not rotate your body.



### The bench/side bench

Keep your body straight. Do not drop the trunk or hip.



# 0 Warm-up (activation)

## GENERAL WARM-UP

Start with a running warm-up for approximately 5 minutes (5 exercises, 1 minute per exercise) before the Knee Control+ exercises. Below is a suggestion for exercises to choose from, but you can also choose other warm-up exercises.

The warm-up can be done on the court or other suitable area if the court is occupied. For the running warm-up set-up we recommend an area of about 20 x 10 m to run on, and to make room for side movements. There should also be some space on the outside of the cones where the players run back to the starting position. The players work in pairs across the court.

**You can hold the stick in your hands, or use the stick and ball, in many of the exercises.**



## 1 Straight-ahead running

Adjust the pace to get your heart rate up.



## 2 Sideways jumps with low centre of gravity

On your toes, run forward one cone length, jump sideways with low centre of gravity across to the other side.





### 3 Running forward with marked direction change

Change direction as if to feint past an opponent at each cone. Freeze the movement for a short time with good control when turning.



### 4 Sideways jumps with low centre of gravity, clap hands

On your toes, run forward one cone length, jump sideways with low centre of gravity, meet the teammate in the centre and clap hands.



0 Warm-up

1 Squats

2 Lunges

3 Jump/  
landing4 Core  
strength5 Hamstring  
strength6 Groin  
strength7 Training  
set-up  
examples

## 5 “Yo-yo jog”

Jog two cone lengths forward with short quick steps, reverse one cone length, low centre of gravity when turning.



## 6 Running in slalom between cones

Mark the turns with a clear planting of the foot.



## 7 Rounding each other

One player jogs slowly straight ahead at the same time as a teammate runs rounds. Players take turn running straight ahead and rounding each other.



## 8 Back kicks/high knees

Run forward doing back kicks, switch to high knees halfway.



0 Warm-up

1 Squats

2 Lunges

3 Jump/  
landing4 Core  
strength5 Hamstring  
strength6 Groin  
strength7 Training  
set-up  
examples

## 9 Bounding jumps

Jump up and forward across the pitch with bouncy steps. High knees in the jump.



## 10 Mirroring

Fast feet with forward, backward or lateral movement: one player starts and the other follows. The player that follows tries to react as quickly as possible and mimic the movements of the player who leads.



**Instruction:**  
Fast feet,  
up on your  
toes!



# 1 Squats

The purpose is to train mobility and strength in multiple joints with good core control. In the one-legged squats you also train balance and knee control by guiding the knee directly over the foot.

## Instructions:

- Guide the knee directly over the foot – no kissing knees (knees buckle inwards)
- Activate the hip muscles
- Maintain a good core control
- Weight over the whole foot
- Slow movement, 2 seconds down and 2 seconds up
- The squat depth depends on your mobility and strength
- Train for 30-60 seconds per leg and exercise with good quality movement

## EXERCISES

### 1A Squats with hands on the chest.

E

Squat with the knees over your feet, weight over your whole feet, with good knee and core control. Slow movement with a soft return.



**Instruction:**  
Sit on a chair!

### 1B Squats with straight arms over the head, up on toes.

E M

Hold a stick with straight arms over your head. Do a squat with the knees over your feet, with good knee and core control. Keep the weight over your whole feet. Slow movement with a soft return, stretch up on your toes.



**Instruction:**  
Hold the stick up high!

### 1C One-legged squats.

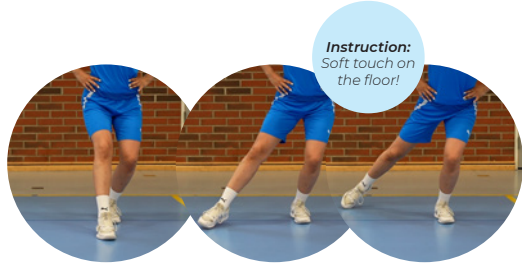
E M

One-legged squats, weight over your whole foot, activate the hip muscles, with good knee and core control. Slow movement with a soft return. Arms out or on the hips. Use a stick for balance support if needed.



**1D** One-legged squats with foot marking.

**M** **A** One-legged squats, weight over your whole foot, with good knee and core control. Mark with the non-supporting foot at 12-2-4-6 o'clock (right leg) or 12-10-8-6 o'clock (left leg).



**Instruction:**  
Soft touch on the floor!

**1E** One-legged squats with diagonal movement.

**A** Hold the stick, make one-legged squats while moving the stick outside of your supporting foot and then make a diagonal movement towards the opposite shoulder. Keep your eyes on the stick.



**Instruction:**  
Eyes on the stick!

**PAIR EXERCISES**

**1F** Squats while holding the stick.

**E** **M** Deep squats with good core control. Knees over your feet. Both players hold the stick between you.



**Instruction:**  
Sit on a chair!

**1G** Squats and passing the ball.

**E** **M** **A** Squats on one or two legs. As you stretch your legs, your teammate passes the ball to you. Receive the ball and pass it back.



Warm-up

0

Squats

1

Lunges

2

Jump/landing

3

Core strength

4

Hamstring strength

5

Groin strength

6

Training set-up examples

7

## 1H One-legged squat with foot press.

M A

One-legged squats while pressing the outside of your free foot against your teammate's foot. Your teammate presses back. Slow movement with a soft return, with good knee and core control.



**Instruction:**  
Press your feet  
against each  
other!

## RESISTANCE BAND EXERCISES

### 1I Squats with resistance band around the knees.

M

Two-legged squats. Press your knees apart during the squat to tighten the resistance band.



**Instruction:**  
Keep the band  
tight!

### 1J One-legged squats with resistance band around the knees.

M A

One-legged squats. Press your leg sideways during the squat to tighten the resistance band.



**Instruction:**  
Keep the band  
tight!



# 2 Lunges

The purpose is to train knee control, lower limb strength, core control, balance and coordination.

## Instructions:

- Feet hip-width apart
- Knee over foot and adjust step length to maintain a good core control
- The depth of the lunge decides the exercise demand
- Activate the core and gluteal muscles for back support
- Train for 30-60 seconds per leg and exercise with good quality movement

## EXERCISES

### 2A Stationary lunges.

E

Stand in a lunge feet hip-width apart, keep a right angle in your forward knee. Body weight equally distributed on both feet. Raise and lower your body straight up, straight down, in a slow movement, 2 seconds down, 2 seconds up with good knee and core control.



### 2B Reverse lunges.

E

Reverse lunge with a big step back, then push back to the starting position. Make a controlled movement with good knee control. Alternate legs.



### 2C Walking forward lunges.

E M

Lift the knee up high and then take a step forward into a deep lunge, with good knee and core control. Push forward, and upwards on toe if you have the strength and balance, followed by a controlled landing. You can also hold a stick in this exercise.



## 2D Walking forward lunges with rotation.

**M** Lift the knee up high and then take a step forward into a deep lunge, with good knee and core control, move the stick from side to side at the same time. Rotate to the left with the left leg forward, rotate to the right with the right leg forward. Follow the stick with your eyes.



**Instruction:**  
Follow the stick!

## 2E Stationary lunge steps with straight arms over the head.

**M A** Hold the stick over your head. Lift the knee up high and then take a step forward into a deep lunge, keep your arms straight over the head. Push back using the forward foot. Alternate legs.



**Instruction:**  
Land softly on the ground!

## 2F Sideways lunges.

**M A** Feet shoulder-width apart, hold the stick in front of you with straight arms. Make a sideways lunge step and shift your weight to the bent outer leg while extending the other leg. Push back to the initial position. Alternate legs.



**Instruction:**  
Land softly on the ground!

## 2G Lunge jumps.

**A** Stand in a deep lunge, jump and quickly swap the position of your feet like a skier. Alternate legs, with soft landings.



**Instruction:**  
Land light as a feather!

## PAIR EXERCISE

**2H** Lunge step with pass.

Take a lunge step forward and pass the ball to your teammate. Push back to the starting position to receive the ball back. Keep a good knee and core control. Alternate legs.

M A



## RESISTANCE BAND EXERCISES

**2I** Walking sideways lunges, short lever.

M Resistance band around the knees, sideways lunges with bent knees and good knee control. Keep the resistance band tight. You can also hold a stick in this exercise.

**2J** Walking sideways lunges, long lever.

A Resistance band around the ankles, sideways lunges with bent knees and good knee control. Keep the resistance band tight. You can also hold a stick in this exercise.



Warm-up

0

Squats

1

Lunges

2

Jump/  
landing

3

Core  
strength

4

Hamstring  
strength

5

Groin  
strength

6

Training  
set-up  
examples

7

# 3 Jump/landing

The purpose is to train jump and landing technique with soft, cushioned landings with good knee and core control.

## Instructions:

- Jump in a controlled tempo.
- Focus on soft landing with knees and hips bent and with good knee and core control.
- Knee over foot.
- Train for 30-60 seconds per leg and exercise.

## EXERCISES

### 3A Two-legged jumps.

E

Two-legged jumps forward/back/sideways with good knee control. Keep the knees over your feet. The exercise should be perfected with good technique before introducing one-legged jumps.



### 3B Sideways skate jumps.

E M

Sideways skate jumps with a soft landing with good core and knee control. Freeze the landing shortly, alternate legs.



### 3C One-legged jumps forward/back.

M

Jump forward with controlled landing, freeze briefly with good knee control, jump back to the starting position with a soft landing.



**3D Fast feet with forward jumps.**

M

Fast-feet jog on the spot and jump forward with a controlled landing with good knee control. Freeze the landing briefly. Alternate legs. **Note:** The coach can control the exercise by using a whistle.

**3E Fast feet with change of direction jumps.**

M A

Fast-feet jog on the spot and jump 90 degrees to one side with a controlled landing with good core control. If you jump to the right, you land on your right leg, and vice versa. Freeze the landing briefly. Switch sides. **Note:** The coach can shout directions to the players or point them in the right direction.

**3F One-legged jumps in a square pattern.**

M A

Stand on one leg and jump right, forward, left, backwards to form a square. Land light as a feather with good knee control. Change legs after 15 to 30 s.

**PAIR EXERCISES****3G Follow-the-leader jumps with movement.**

E M A

One player determines what the jump will be, and the teammates follow. Can be done in different directions and with two-legged or one-legged landing. Land softly with good knee control.

**3H Mirror jumps.**

M A

Stand opposite your teammate facing each other. Make a fast-feet jog on the spot and jump to either side, forwards or backwards. One player determines what the jump will be, and the teammate follows the movement. Make a controlled landing with good core control.



Warm-up

0

Squats

1

Lunges

2

Jump/  
landing

3

Core  
strength

4

Hamstring  
strength

5

Groin  
strength

6

Training  
set-up  
examples

7

### 3I Sideways skate jumps with pass.

M A

Jump sideways to the stick side and receive and pass the ball to your teammate, and then jump back to the other foot. Make a soft landing with good core and knee control. Alternate legs. Cooperate with your teammate for correct timing.



### 3J Jumps with a push.

A

Jump and land with good knee control on either one or two legs while a teammate pushes you in different directions as you jump. Land softly with good balance and knee control.



*Instruction:  
Land softly with  
good balance!*

Warm-up

0

Squats

1

Lunges

2

Jump/  
landing

3

Core  
strength

4

Hamstring  
strength

5

Groin  
strength

6

Training  
set-up  
examples

7

# 4 Core strength

The purpose is to train core strength, upper body strength and core control.

## Instructions:

- Ask the player where they are fatigued – target is the abdomen/stomach
- Activate the core and gluteal muscles
- Even distribution between the feet and upper body/arms, keep the back neutral and maintain a good posture (the bench)
- Press the shoulders off the ground via the forearms (the bench)
- Use a rubber mat if needed
- Train for 30-60 seconds

## EXERCISES

### 4A The bench with knees on the ground.

- E** Lean on your forearms, with your elbows directly under your shoulders. Activate your abdominal and gluteal muscles. Fatigue should be felt in your abdomen. Keep your body straight like a plank.



### 4B The bench with toes on the ground.

- E M** Lean on your forearms, with your elbows directly under your shoulders. Activate your abdominal and gluteal muscles. Fatigue should be felt in your abdomen. Keep your body straight like a plank.



### 4C Side bench.

- E M** Side lying with one forearm and one foot on the ground. Keep your elbow directly under the shoulder. Activate the core and gluteal muscles, hold the position still. Keep your body straight like a plank.

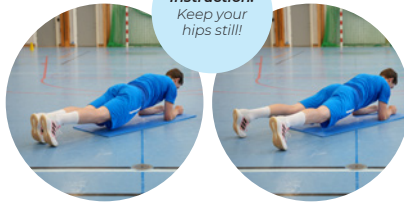


**4D Side lying hip lift.****M A**

Lie on your side with your weight on your forearm and one foot. Keep your elbow directly under your shoulder. Activate the core and gluteal muscles. Lift and lower your hip, alternating 2 seconds up, 2 seconds down.

**4E The bench on toes with foot movement.****M A**

Lean on your forearms and activate the core and gluteal muscles. Move both feet alternately outwards and inwards, keeping a good core control. The fatigue should be felt in the abdomen. Keep your body straight like a plank.



**Instruction:**  
Keep your hips still!

**4F The bench with upper body rotation.****M A**

Lean on your forearms, with your elbows directly under your shoulders. Rotate the upper body and raise your arm straight up to the ceiling, follow the hand with your eyes. Alternate sides. Activate your abdominal and gluteal muscles.

**4G Leg drops.****M A**

Lie on your back and press the small of your back against the ground. Touch the ground lightly (mark only) with your heels, one at a time, alternate between legs. Activate the core muscles to maintain a good core control. The more you extend your leg, the heavier it gets.



**Instruction:**  
Press the small of your back against the ground!



## PAIR EXERCISES

**4H** Sit-ups with a ball.

E M A

Lie with bent legs opposite your teammate with the soles of your feet touching. Do a sit-up and deliver or throw the ball to your teammate, who does sit-ups at the same pace as you.

**4I** The bench with hand claps.

E M A

Stand in a bench with elbows and feet on the ground, or knees on the ground as an easy option. Clap hands with each other, one hand at a time. Maintain a good core control. Fatigue should be felt in the abdomen.

**4J** The wheelbarrow.

E M A

Walk forward. Stand in a bench with your hands on the ground while a teammate holds your feet. "Walk" forward with your hands while your teammate lifts your legs. Activate the front thigh, core and gluteal muscles and maintain a straight line with the body, like a plank.



**Instruction:**  
Walk forward.  
Keep the body  
straight like a  
plank!

Warm-up

0

Squats

1

Lunges

2

Jump/  
landing

3

Core  
strength

4

Hamstring  
strength

5

Groin  
strength

6

Training  
set-up  
examples

7

# 5 Hamstring strength

The purpose is to strengthen the back thigh (hamstrings), gluteal and core muscles.

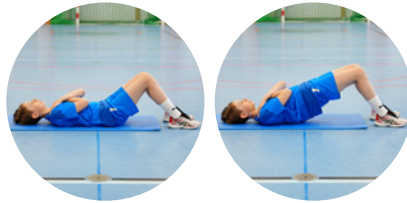
## Instructions:

- Activate the core muscles to support the lower back.
- Slow controlled movement, 2 seconds up and 2 seconds down (pelvic lift).
- Press the sole of the foot against the ground to activate the hamstrings (pelvic lift).
- Train for 30-60 seconds.

## EXERCISES

### 5A Pelvic lifts with both feet on the ground.

- E** Press the feet against the ground and lift the pelvis with good core control. Slow controlled movement, 2 seconds up and 2 seconds down.



### 5B Pelvic lifts with feet on a bench.

- E M** Press the feet against the bench and lift the pelvis with good core control. Slow controlled movement, 2 seconds up and 2 seconds down. Increase difficulty by moving further away from the bench.



### 5C Pelvic lifts with one foot on the ground.

- E M** Press one foot to the ground and lift the pelvis with good core control using one leg. Pull your other leg up toward your stomach, either keep your arms by your sides, or hands on the knees. Train for 15-30 seconds and then shift legs.



## 5D Pelvic lifts with side movement.

- M A** Press one foot to the ground and lift the pelvis with good core control using one leg. At the same time extend the free leg and move it slowly to the side out and in again. Alternate between legs.



## 5E Pelvic lifts with explosive thrust.

- M A** Lie with one foot in the ground and the other in the air. Lift your pelvis and keep it in the same position throughout the exercise. Push away with the ground contact foot and quickly shift feet by landing on the opposite foot. Activate the core and gluteal muscles to support the lower back and maintain a good core control.



## 5F The dragon.

- M A** Stand with your knee slightly bent. Lean forward from your hip on one leg, stretch your non-supporting leg straight back, stretch your arms straight forward holding the stick. **Note:** turning the toes on your free leg inwards makes it easier to find the correct technique. Straighten your body and hold the stick over your head with stretched arms. Keep your hips parallel. Train one leg for 30 seconds, then shift legs. **Note:** fatigue should be felt in the back thigh and gluteal muscles of your supporting leg.



## PAIR EXERCISES

### 5G One-legged pelvic lifts with support.

- M A** Lie on your back, elbows on the ground or hands across the chest. Your teammate stands with bent knees, holding the heel of your foot while you lift and lower your pelvis. Activate the core and gluteal muscles to support the lower back.



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0

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1

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2

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3

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4

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5

Groin  
strength

6

Training  
set-up  
examples

7

## 5H Nordic hamstrings.

A

Stand on your knees with the toes in the ground, a teammate holds your legs stable. Lean forward slowly as far as possible with good posture. When you can no longer hold, drop down and push yourself back up to the starting position with your arms. **Note:** *this is a high-load exercise and may be restricted to 2 times/week in pre-season, and 1 time/week in the competitive season, alternate with other hamstring strength exercises.*



## RESISTANCE BAND EXERCISES

### 5I Pelvic lifts with a resistance band.

E M

Resistance band around the knees, tighten the band by pressing your knees apart while lifting and lowering your pelvis, 2 seconds up x 2 seconds down.



**Instruction:**  
Keep the band tight!

### 5J Standing hamstring curls.

M A

Resistance band at the ankles or under the foot. Make explosive heel kicks. Alternate the legs, or train one side at a time for 30 seconds each.



**Instruction:**  
Explosive heel kick!

Warm-up

0

Squats

1

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2

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landing

3

Core  
strength

4

Hamstring  
strength

5

Groin  
strength

6

Training  
set-up  
examples

7

# 6 Groin strength

The purpose is to train endurance and strength for the hip, groin and core muscles.

## Instructions:

- Fatigue should be felt in the inside of your thigh (groin).
- No pain in the groin or lower back during the exercises.
- Choose an easier exercise option if you experience pain.
- For the one-legged exercises, complete one side first before you change legs.
- Slow movements, 2 seconds down and 2 seconds up.
- Activate the core muscles for lower back support and good posture.
- Train for 30-60 seconds.

## EXERCISES

### 6A Standing leg swing.

E

Stand on one leg with your knee slightly bent and swing your free leg diagonally forward-backward with your foot pointing outwards at a medium pace, 1 second forward, 1 second back.



### 6B Single-standing cross-country skiing.

E M

Stand on one leg and swing your arms diagonally. At the same time, do small knee bends in a rocking motion at the same pace as your arm swing, keep a medium pace, 1 second forward, 1 second back.

Warm-up  
0Squats  
1Lunges  
2Jump/  
landing  
3Core  
strength  
4Hamstring  
strength  
5Groin  
strength  
6Training  
set-up  
examples  
7

**6C** Sumo squats.

E M

Stand with your legs wide apart and your feet pointing outwards. Perform deep squats with your back straight. Your knees should point in the same direction as your feet. The exercise should be felt on the inside of your thighs and glutes.

**6D** Side lying leg lift (adduction).

E M

Stabilise your upper leg in front of your body, knee on the ground. Keep the bottom leg straight while alternately lifting and lowering the leg in a slow pace.

**6E** Lateral leg drop.

E M

Lie on your back with legs at an angle and the soles of your feet facing upward. Slowly move one leg to the side and then back again with good core control.

**6F** Side plank with static activation of the groin.

M A

Do a side plank with the foot of your upper leg and your lower forearm on the ground. Move your upper arm and lower leg toward each other. Keep your back straight throughout the exercise and maintain good core control.



## PAIR EXERCISES

**6G** Static hip press (Adductor/abductor squeeze).

E M A

Sit on the floor facing your teammate, support on the hands behind your back. The player who has the legs externally presses inwards, and the player who has the legs internally presses outwards. Press with full force and hold for 10 seconds, rest 5 seconds. Repeat 3 times, and then change position.

**6H** Copenhagen adduction, short lever.

M A

Your teammate stabilises your upper leg at the knee. Lift your lower leg while pushing your body off the ground, then slowly lower again. Keep a straight line through your body and work at a steady pace up and down. Your teammate stands steady and with good posture. **Note:** this is a high-load exercise and may be restricted to 2 times/week in pre-season, and 1 time/week in the competitive season, alternate with other groin strength exercises.

**6I** Copenhagen adduction, long lever.

A

Your teammate stabilizes your upper leg with the weight at the ankle. Lift your lower leg while pushing your body off the ground, then slowly lower again. Keep a straight line through your body and work at a steady pace up and down. Your teammate stands steady and with good posture. **Note:** this is a high-load exercise and may be restricted to 2 times/week in pre-season, and 1 time/week in the competitive season, alternate with other groin strength exercises.



## RESISTANCE BAND EXERCISE

**6J** Standing adduction with resistance band.

E M A

Attach a resistance band between yours and a teammate's foot, holding one hand on your teammate's shoulder to keep your balance. Slowly move your leg inward and hold back slowly on the way out. Stand straight, with a strong core.



**Instruction:**  
Hold back slowly!



Warm-up

0

Squats

1

Lunges

2

Jump/  
landing

3

Core  
strength

4

Hamstring  
strength

5

Groin  
strength

6

Training  
set-up  
examples

7

# 7 Training set-up examples

## E TRAINING SET-UP EXAMPLES

Start with a running warm-up, approximately 5 minutes. Complete all 6 exercises during 30-60 seconds (approximately 8-15 repetitions per exercise) in 2 sets. Players should be tired from the exercises but able to complete all the repetitions with proper technique. Exercises 4-6 (with focus on strength) can be placed at the end of the training session if this suits the set-up better.

### 1B Squats with straight arms over the head, up on toes.

Hold a stick with straight arms over your head. Do a squat with the knees over your feet, with good knee and core control. Keep the weight over your whole feet. Slow movement with a soft return, stretch up on your toes.



**Instruction:**  
Hold the stick up high!

### 2A Stationary lunges.

Stand in a lunge feet hip-width apart, keep a right angle in your forward knee. Body weight equally distributed on both feet. Raise and lower your body straight up, straight down, in a slow movement, 2 seconds down, 2 seconds up with good knee and core control.



### 3G Follow-the-leader jumps with movement.

One player determines what the jump will be, and the teammates follow. Can be done in different directions and with two-legged or one-legged landing. Land softly with good knee control.





## 4J The wheelbarrow.

Walk forward. Stand in a bench with your hands on the ground while a teammate holds your feet. "Walk" forward with your hands while your teammate lifts your legs. Activate the front thigh, core and gluteal muscles and maintain a straight line with the body, like a plank.



## 5B Pelvic lifts with feet on a bench.

Press the feet against the bench and lift the pelvis with good core control. Slow controlled movement, 2 seconds up and 2 seconds down. Increase difficulty by moving further away from the bench.



## 6A Standing leg swing.

Stand on one leg with your knee slightly bent and swing your free leg diagonally forward-backward with your foot pointing outwards at a medium pace, 1 second forward, 1 second back.



Warm-up

0

Squats

1

Lunges

2

Jump/  
landing

3

Core  
strength

4

Hamstring  
strength

5

Groin  
strength

6

Training  
set-up  
examples

7

## M EXAMPLE SET-UP, MEDIUM LEVEL

Start with a running warm-up, approximately 5 minutes. Complete all 6 exercises during 30-60 seconds (approximately 8-15 repetitions per exercise) in 2 sets. Players should be tired from the exercises but able to complete all the repetitions with proper technique. Exercises 4-6 (with focus on strength) can be placed at the end of the training session if this suits the set-up better.

### 1C One-legged squats.

One-legged squats, weight over your whole foot, activate the hip muscles, with good knee and core control. Slow movement with a soft return. Arms out or on the hips. Use a stick for balance support if needed.



### 2I Walking sideways lunges, short lever.

Resistance band around the knees, sideways lunges with bent knees and good knee control. Keep the resistance band tight. You can also hold a stick in this exercise.



### 3B Sideways skate jumps.

Sideways skate jumps with a soft landing with good core and knee control. Freeze the landing shortly, alternate legs.



## 4B The bench with toes on the ground.

Lean on your forearms, with your elbows directly under your shoulders. Activate your abdominal and gluteal muscles. Fatigue should be felt in your abdomen. Keep your body straight like a plank.

**Instruction:**  
Keep straight  
like a plank!



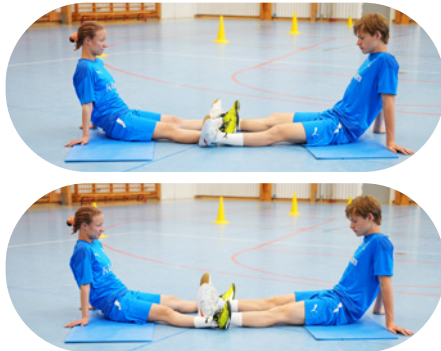
## 5C Pelvic lifts with one foot on the ground.

Press one foot to the ground and lift the pelvis with good core control using one leg. Pull your other leg up toward your stomach, either keep your arms by your sides, or hands on the knees. Train for 15-30 seconds and then shift legs.



## 6G Static hip press (Adductor/abductor squeeze).

Sit on the floor facing your teammate, support on the hands behind your back. The player who has the legs externally presses inwards, and the player who has the legs internally presses outwards. Press with full force and hold for 10 seconds, rest 5 seconds. Repeat 3 times, and then change position.



Warm-up

0

Squats

1

Lunges

2

Jump/  
landing

3

Core  
strength

4

Hamstring  
strength

5

Groin  
strength

6

Training  
set-up  
examples

7

## A EXAMPLE SET-UP, ADVANCED LEVEL

Start with a running warm-up, approximately 5 minutes. Complete all 6 exercises during 30-60 seconds (approximately 8-15 repetitions per exercise) in 2 sets. Players should be tired from the exercises but able to complete all the repetitions with proper technique. Exercises 4-6 (with focus on strength) can be placed at the end of the training session if this suits the set-up better.

### 1J One-legged squats with resistance band around the knees.

One-legged squats. Press your leg sideways during the squat to tighten the resistance band.



**Instruction:**  
Keep the band tight!

### 2H Lunge step with pass.

Take a lunge step forward and pass the ball to your teammate. Push back to the starting position to receive the ball back. Keep a good knee and core control. Alternate legs.



### 3J Jumps with a push.

Jump and land with good knee control on either one or two legs while a teammate pushes you in different directions as you jump. Land softly with good balance and knee control.



**Instruction:**  
Land softly with good balance!

## 4H Sit-ups with a ball.

Lie with bent legs opposite your teammate with the soles of your feet touching. Do a sit-up and deliver or throw the ball to your teammate, who does sit-ups at the same pace as you.



## 5H Nordic hamstrings.

Stand on your knees with the toes in the ground, a teammate holds your legs stable. Lean forward slowly as far as possible with good posture. When you can no longer hold, drop down and push yourself back up to the starting position with your arms. **Note:** this is a high-load exercise and may be restricted to 2 times/week in pre-season, and 1 time/week in the competitive season, alternate with other hamstring strength exercises.



## 6H Copenhagen adduction, short lever.

Your teammate stabilises your upper leg at the knee. Lift your lower leg while pushing your body off the ground, then slowly lower again. Keep a straight line through your body and work at a steady pace up and down. Your teammate stands steady and with good posture. **Note:** this is a high-load exercise and may be restricted to 2 times/week in pre-season, and 1 time/week in the competitive season, alternate with other groin strength exercises.



Warm-up

0

Squats

1

Lunges

2

Jump/  
landing

3

Core  
strength

4

Hamstring  
strength

5

Groin  
strength

6

Training  
set-up  
examples

7

NOTES

Warm-up  
0

Squats  
1

Lunges  
2

Jump/  
landing  
3

Core  
strength  
4

Hamstring  
strength  
5

Groin  
strength  
6

Training  
set-up  
examples  
7

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