

**ACC**  
**SportSmart**

# WARM UP GUIDE

**The game doesn't start  
with the whistle –  
it starts with the warm up.**



**ACC**

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# INTRODUCTION

The ACC SportSmart warm up is a complete strength and conditioning warm up guide that aims to improve performance and keep athletes injury free. Athletes will become fitter, faster and stronger and there's a lot of science to back that up.

A study published by the British Medical Journal in 2008 found that teams performing this warm up at least twice a week had 37% fewer training injuries and 29% fewer game injuries. Severe injuries reduced by almost 50%.

This warm up should replace your usual warm up prior to training and games. While all individual athletes will benefit from this warm up no matter what sport they play, there are also specific warm up versions for netball, league, football and rugby.

This warm up is based on the FIFA 11+ warm up programme and fits under ACC SportSmart Principle 2 – Physical conditioning.

**SEVERE  
INJURIES  
REDUCED  
BY ALMOST  
50%**



# ELEMENTS OF INJURY PREVENTION

This warm up covers the three key elements of effective injury prevention for sport: core strength, muscular control and balance, and plyometrics and agility.

## 01 **Core training**

The core represents a functional unit, which not only includes the muscles of the trunk (abdominals, back extensors) but also of the pelvic-hip region. Maintaining core stability and strength is one of the keys for optimal functioning of the lower body (especially the knee joint).

Athletes must have sufficient strength and control in their hip and trunk muscles to provide core stability. There is growing scientific evidence that core stability has an important role to play in injury prevention.

## 02 **Muscular control and balance**

Muscular control involves different aspects of muscle actions, muscle activations, coordination, stabilisation, body posture, and balance.

There is strong scientific evidence that sport-specific muscular training programmes can effectively prevent knee and ankle injuries.

# 03

## **Plyometrics and agility**

Plyometrics are exercises that enable a muscle to reach maximum strength in as short a time as possible. Plyometrics used to be known as 'jump-training'. When athletes land from a jump, the muscles experience a quick shift from 'eccentric' contractions to 'concentric' contractions which give the next jump more power. The combination of contractions helps build muscle.

Eccentric muscle contractions are rapidly followed by concentric contractions in a lot of skills required in various sports. Consequently, specific functional exercises that emphasise this rapid change in muscle action must be used to prepare athletes for their sport-specific activities. Plyometrics train specific movement patterns in a biomechanically correct way, therefore strengthening the muscle, tendon and ligament more functionally.

Plyometrics and agility drills are particularly effective in injury prevention, especially of ACL injuries, but also of other knee and ankle injuries.

# STRUCTURE OF THE WARM UP

You should use the warm up guide for both pre-training and on game day.

No matter what your sport or physical activity, these warm up routines should replace your usual warm ups, prior to both training and games.

A key point in the programme is to use the proper technique during all the exercises. Pay full attention to correct posture and good body control, including straight leg alignment, knee-over-toe position and soft landings. We've included some tips to help you with each exercise.

## **Pre-training**

The pre-training warm up is broken into three parts with a total of 15 exercises. You should do these exercises in the specified sequence at the beginning of each training session. We recommend doing this at least twice a week to get the greatest benefit. It will take 20 minutes to complete.

### **Part 1**

Running exercises at a slow speed combined with active stretching and controlled partner contacts.

### **Part 2**

Six sets of exercises focused on core and leg strength, balance, and plyometrics and agility. These exercises have three levels (beginner, intermediate and advanced) designed



to match your level of experience, fitness and competency. We recommend everyone starting at the beginner level. You can identify the different levels by the icons (B) (I) or (A).

### Part 3

Running exercises at moderate and high speed combined with planting and cutting movements.

Some of the exercises require a partner and a ball. If you're an individual athlete or you don't have a ball you can still do this warm up, but without completing the hamstring and single leg stance exercises in part two.

### Game day

The game day warm up consists of nine running exercises from part one and part three. You should do these exercises in the specified sequence before your game. It should take 10 minutes to complete. You can identify the game day exercises by the star icon.

#### Key



Game day exercises



Beginner level



Number of exercise repetitions



Intermediate level



Advanced level

# Q&A

## **What is the ACC SportSmart warm up?**

The ACC SportSmart warm up is a complete warm up programme that aims to reduce the most common injuries of athletes and sportspeople.

## **What is the benefit of doing this programme compared to a standard warm up?**

If you do the warm up twice a week compared to doing a standard warm up (running around and stretching), you make better players and teams. Individual athletes become fitter, faster and stronger and there's a lot of science to back that up.

Teams perform better because coaches have more players to select from. An example of this is in the UEFA Champions League (contested by top-division European football clubs), where teams that get injured less are more likely to win the Champions League and they're more likely to win their domestic leagues. In New Zealand, where we have quite a small player pool, if we can keep our best players on the park, we're far more likely to be successful.

## **Is the warm up just for top teams and athletes?**

No. The warm up is for all players at all levels, not just elite athletes. We understand that the motivation for amateur and recreational athletes looking to avoid injury is very different to what motivates professional athletes to stay injury free. And yet the best way to prevent injury is the same for both. That's what makes the SportSmart

programme so important: the more that active New Zealanders from all levels of sport and recreation are involved, the more injury-free New Zealand will be.

### **Why is this programme aimed at coaches?**

Often coaches will give their players strength and conditioning programmes to do and most of the time the players don't do it. This is a small strength and conditioning programme that's far more successful because it's coach-led – if the coach gets into it, it's something they can directly see and visualise so they know their players are actually doing this.

### **Who developed the warm up?**

The warm up was developed by a group of international experts from the Medical Assessment and Research Centre at FIFA, the Oslo Sports Trauma Research Center and the Santa Monica Orthopaedic and Sports Medicine Research Foundation.

### **What are the advantages of the warm up?**

The prevention effect of the programme has scientifically been proven. It is simple and does not require appliances, equipment (meaning no extra costs) or specialist knowledge. It is a complete warm up programme with different levels. It is efficient, as most of the exercises train several aspects and can replace other exercises.

### **Are the exercises new?**

Most of the exercises are not new and yet have not become routine. The innovation is in putting these exercises together into a simple and practicable programme that should be the standard warm up prior to every training session.

## **Why were these exercises chosen?**

The exercises are 'evidence-based' or 'best practice'. They are designed to prevent the most frequent types of injury like groin and thigh strains as well as ankle sprains and knee ligament injuries.

Most young athletes that tear their ACL (Anterior Cruciate Ligament) and want to play sport are going to have an ACL reconstruction. If you tear your ACL, it sets you up for a lifetime of problems with your knee and you're more likely to have a knee replacement and future surgery. If you tear ACL in adolescence, you're very unlikely to ever make it as a professional athlete. By doing this programme twice a week you can reduce the chances of tearing your ACL by more than half.

## **What do the exercises achieve?**

The exercises lead to a strengthening of the core and leg muscles. In addition, static, dynamic and reactive neuromuscular control, coordination, balance, agility and jump technique are improved.

## **Why doesn't the warm up include stretching exercises?**

Research has shown that static stretching exercises have a negative influence on muscle performance, and results on the preventive effect of dynamic stretching are inconclusive. Stretching exercises are not recommended as part of a warm up programme, but can be performed at the end of the training session.

## **When should players do the warm up?**

The warm up should be performed in full prior to every training session, and in a shortened version (parts one and three) before each match.

### **How often should players do the warm up?**

Before every training session (at least twice a week), and the running exercises (parts one and three) before every match.

### **What should players pay special attention to when carrying out the exercises?**

To be effective, it is important that each exercise is carried out with precision, exactly as described in this manual. Ideally, the coach should supervise the exercises and correct the players if necessary.

### **How long does it take to do the warm up?**

If the players are familiar with the exercises, 20 minutes for the pre-training routine and 10 minutes on game day.

### **How long does it take before the warm up has an effect?**

Depending on how often a player trains, about 10 to 12 weeks.

### **What about other preventive measures?**

Other preventive measures are, of course, a good idea, especially fair play and wearing the right protective gear.

### **How old do players need to be to do the warm up?**

At least 14 years old. If players are younger, some exercises should not be performed, and for others, the intensity should be modified.

# HOW TO TEACH THE WARM UP

## **Understanding why injury prevention is important to you**

Most athletes know injury prevention and warming up is important but they often create barriers to making it a priority. They need a personal driver for keeping injury free.

To begin teaching the warm up, we suggest having a discussion with your team or athletes about why playing sport or participating in a physical activity is important for them.

Ask them how they would feel if they were unable to play due to injury. Some might feel like they would be missing out on the social or competitive aspects of sport, or they might feel like they were letting their teammates down. For others, being injured might mean they can't achieve their desired lifestyle.

Some athletes are more motivated by improving their performance. You can talk to these athletes about the importance of getting the basics right. Mastering the run, catch, pass, jump, and step (all aspects of this warm up) are fundamental to developing good technique.

Getting the warm up right will help your athletes improve their overall performance. It also means they'll be more likely to avoid injury and keep playing the game or activity they love for longer.

## Teaching the exercises

Once everyone has identified their own personal driver for staying injury free, you can begin teaching the exercises.

The key for efficient teaching is to start at level one and focus on how to perform the exercises correctly. Carefully correct all mistakes. Good body positioning is crucial. This allows for better muscular work and a more efficient training session.

When the athletes are able to perform the exercises correctly, the duration and the number of repetitions can be raised to the appropriate intensity.

The following steps are helpful in teaching individual exercises:

- explain briefly and demonstrate the exercise
- instruct the athletes to practise the exercise and give general feedback/corrections
- discuss some of the problems with the athletes as a group, and then demonstrate the exercise again, perhaps with one player who performs it well
- instruct the athletes to perform the exercise again, and give individual feedback/corrections.

This method is particularly recommended for the six exercises in part two. The running exercises in parts one and three may need less explanation and consequently less learning time. Usually, it will take a minimum of two or three training sessions until the athletes are able to perform all exercises of the warm up (level one) correctly.

## **Progressing to the next level**

All athletes should begin with level one. Only when an exercise can be performed without difficulty for the specified duration and number of repetitions should the athlete progress to the next level of the exercise.

There are three options:

1. Ideally, progression to the next level is determined individually for each athlete.
2. Alternatively, all athletes can progress to the next level for some exercises but continue with the current level for other exercises.
3. For simplicity, all athletes can progress to the next level of all exercises after three or four weeks.

For all exercises, correct performance is really important. Therefore a coach or trainer should supervise the programme and correct the athletes if necessary.



# IT'S ABOUT GETTING THE BASICS RIGHT



# WHAT YOU'LL NEED

## **To complete the warm up sessions you'll need:**

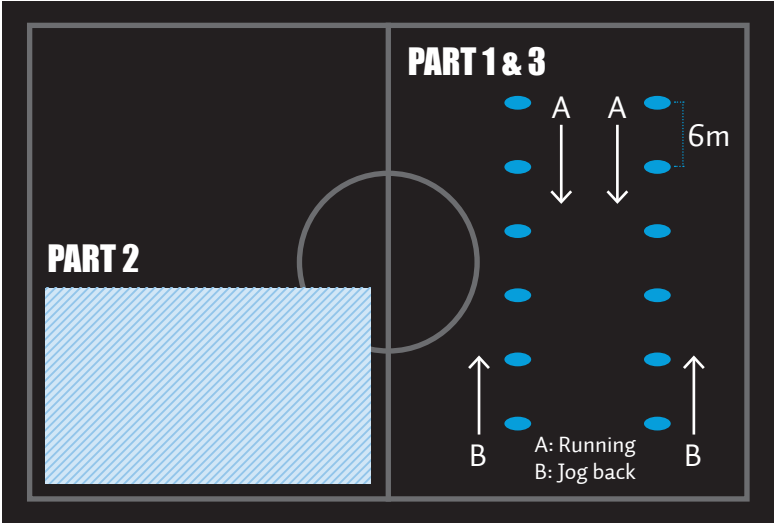
- a length of 30 metres
- 6 pairs of cones
- 1 ball per 2 athletes. This is only required for the pre-training warm up and can be any ball of your choice.

## **For teams we recommend:**

- setting up a course of 6 pairs of parallel cones, approximately 5-6 metres apart
- two athletes start at the same time from the first pair of cones, jog along the inside of the cones and do the various exercises on the way
- after the last cone run back along the outside.

If you don't have cones you can still complete the exercises over 30 metres. Some of the exercises require a partner and a ball. If you're an individual athlete or you don't have a ball you can still do this warm up, but without completing the hamstring and single leg stance exercises in part two.

**Set-up:**







# PART 1

# RUNNING

**01 STRAIGHT AHEAD**

**02 HIP OUT**

**03 HIP IN**

**04 CIRCLING PARTNER**

**05 JUMPING WITH SHOULDER CONTACT**

**06 QUICK FORWARDS AND BACKWARDS**





# RUNNING STRAIGHT AHEAD

Running in the correct position will help with your rhythm and technique.

## Exercise:

Jog to the last cone and back. Run slightly quicker on the way back.



Do the exercise twice



Game day exercise





## Tips:

- Put in a bit more effort on the way back.
- Don't let your knees buckle inwards.
- Keep your upper body straight.
- Your hips, knees and feet should be aligned.

Running with your hip out helps to stretch your thighs and increase mobility.

## Exercise:

Jog to the first cone. Stop and lift your knee forwards. Rotate your knee to the side and put your foot down. Jog to the next cone and do the exercise on the other leg. When you have finished the course, jog back. Do the exercise twice.



Do the exercise twice



Game day exercise



## Tips:

- Keep your hip, knee and foot of the supporting leg aligned.
- Alternate legs at each cone.
- Keep your pelvis horizontal and engage your core.

Running with your hip in is another hip-flexing exercise to help avoid injury.

**Exercise:**

Jog to the first cone. Stop and lift your knee to the side. Rotate your knee forwards and put your foot down. Jog to the next cone and do the exercise on the other leg. When you have finished the course, jog back. Do the exercise twice.



Do the exercise twice



Game day exercise



## Tips:

- Keep your hip, knee and foot of the supporting leg aligned.
- Keep your pelvis horizontal and engage your core.
- Don't let the knee of the supporting leg buckle inwards.

## RUNNING CIRCLING PARTNER

This helps to work your adductors and abductors while warming up your legs. If you don't have a partner, you can still do this exercise as an individual.

### Exercise:

Jog as a pair to the first cones. Shuffle sideways at a 90-degree angle towards your partner, then shuffle a circle around one another, looking straight ahead, then back to the cone. Jog to the next cone and repeat the exercise. Do the exercise twice.



Do the exercise twice



Game day exercise



## Tips:

- Bend your hips and knees slightly.
- Carry your bodyweight on the balls of your feet.
- Don't let your knees buckle inwards.

# RUNNING SHOULDER CONTACT

Dynamically warming up your legs is important for the biggest muscles in our bodies. If you don't have a partner, you can still do this exercise as an individual.

## Exercise:

Jog to the first cone. Shuffle sideways at a 90-degree angle to your partner. In the middle, jump sideways to make shoulder-to-shoulder contact. Land on both feet with hips and knees bent, then shuffle back to the cone. Jog to the next cone and repeat the exercise. Do the exercise twice.

A black circle containing the white text 'X2'.

Do the exercise twice



Game day exercise





## Tips:

- Land on both feet with your hips and knees bent.
- Don't let your knees buckle inwards.

# RUNNING QUICK FORWARDS AND BACKWARDS

Practising acceleration and deceleration when sprinting is key to avoiding injury.

## Exercise:

As a pair, run quickly to the second cone then run backwards, quickly, to the first cone. Keep your hips and knees slightly bent. Repeat, running two cones forwards and one cone backwards. When you have finished the course, jog back. Do the exercise twice



Do the exercise twice



Game day exercise

# RUNNING QUICK FORWARDS AND BACKWARDS

06



## Tips:

- Make sure you keep your upper body straight.
- Your hips, knees and feet should be aligned.
- Don't let your knees buckle inwards.





# PART 2 STRENGTH, PLYOMETRICS & BALANCE



- 07 THE BENCH**  
**STATIC**  
**ALTERNATE LEGS**  
**LEG LIFT AND HOLD**
- 08 SIDEWAYS BENCH**  
**STATIC**  
**RAISE AND LOWER HIP**  
**LEG LIFT**
- 09 HAMSTRINGS**  
**BEGINNER**  
**INTERMEDIATE**  
**ADVANCED**
- 10 SINGLE LEG STANCE**  
**HOLD THE BALL**  
**THROWING BALL WITH PARTNER**  
**TEST YOUR PARTNER**
- 11 SQUATS**  
**WITH TOE RAISE**  
**WALKING LUNGES**  
**ONE-LEG**
- 12 JUMPING**  
**VERTICAL JUMPS**  
**LATERAL JUMPS**  
**BOX JUMPS**

# THE BENCH STATIC

Strengthening your core muscles ensures stability of the body in all movements. This is a beginner level exercise.

## Exercise:

Start by lying on your front, supported on forearms and feet. Lift upper body, pelvis and legs until your body is a straight line from head to foot. Draw your shoulder blades in towards your spine so that they lie flat against your back. Your elbows should be directly under your shoulders.

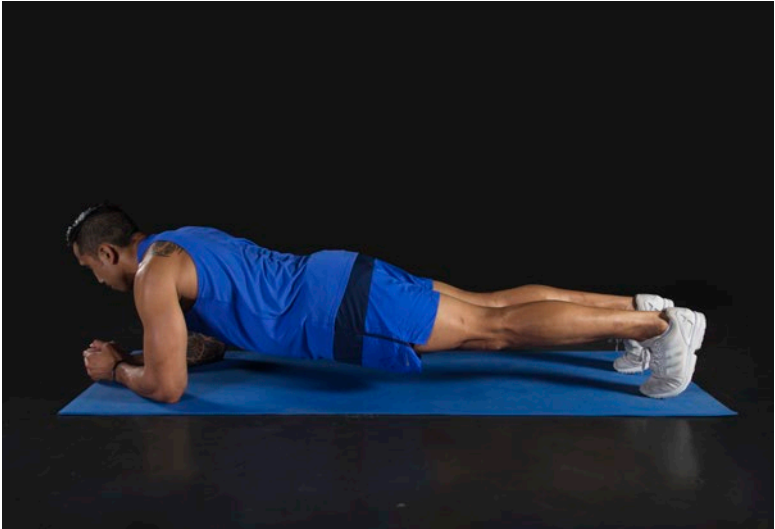
Pull in stomach and gluteal muscles and hold the position for 20-30 seconds.

Return to the starting position, take a short break and repeat the exercise.

**B** Beginner level exercise

**X3** 20 – 30 seconds each





## Tips:

- Don't tilt your head backwards.
- Don't raise your buttocks.
- Don't sway or arch your back.

# THE BENCH ALTERNATIVE LEGS

Strengthening your core muscles ensures stability of the body in all movements. This is an intermediate level exercise

## Exercise:

Start by lying on your front, supported on forearms and feet. Lift upper body, pelvis and legs until your body is a straight line from head to foot. Draw your shoulder blades in towards your spine so that they lie flat against your back. Your elbows should be directly under your shoulders. Pull in your stomach and gluteal muscles. Lift each leg in turn, holding for a count of two seconds. Continue for 40-60 seconds.

Return to the starting position, take a short break and repeat the exercise. Do the exercise three times.

I Intermediate level exercise

X3 20 – 30 seconds each

# THE BENCH ALTERNATIVE LEGS

07b



## Tips:

- Keep pelvis stable, don't tilt.
- Don't tilt your head backwards.
- Don't raise your buttocks.
- Don't sway or arch your back.

## THE BENCH LIFT AND HOLD

Strengthening your core muscles ensures stability of the body in all movements. This is an advanced level exercise.

### Exercise:

Start by lying on your front, supported on forearms and feet. Lift upper body, pelvis and legs until your body is a straight line from head to foot. Draw shoulder blades in towards your spine so they lie flat against your back. Your elbows should be directly under your shoulders. Pull in your stomach and gluteal muscles. Lift one leg 10-15 centimetres off the ground and hold for 20-30 seconds.

Return to the starting position, take a short break and repeat with the other leg. Do the exercise three times.

**A** Advanced level exercise

**X3** 20 – 30 seconds each

# THE BENCH LIFT AND HOLD

07c



## Tips:

- Don't tilt your head backwards.
- Don't sway or arch your back.
- Don't raise your buttocks.
- Keep your pelvis stable and do not let it tilt to the side.

# SIDEWAYS BENCH STATIC

Strengthening your lateral core muscles stabilises your body. This is a beginner level exercise.

## Exercise:

Start by lying on your side with the knee of your lowermost leg bent to 90 degrees and supporting yourself with your forearm.

Lift your pelvis and uppermost leg until they form a straight line with your shoulder and hold the position for 20-30 seconds. The elbow of your supporting arm is directly under your shoulder.

Return to the starting position, take a short break and repeat the exercise on the other side. Complete the exercise three times on each side.

**B** Beginner level exercise

**X3** 20 – 30 seconds on each side

# SIDEWAYS BENCH STATIC

08a



## Tips:

- When viewed from the front, your hip, knee and foot of your supporting leg should be in a straight line.
- Always keep the hip and knee of your supporting leg slightly bent.
- Keep your weight on the ball of your foot.
- Keep your upper body stable and facing forwards.
- Keep your pelvis horizontal.
- Don't let your knees buckle inwards.
- Don't let your pelvis tilt to the side.

# SIDWAYS BENCH RAISE AND LOWER HIP

Strengthening your lateral core muscles stabilises your body. This is an intermediate level exercise.

## Exercise:

Start by lying on your side with both legs straight and supporting yourself on your forearm. Now raise your pelvis and legs until your body forms a straight line from the uppermost shoulder to the uppermost foot. Only the outside of the lowermost foot remains on the ground.

Now lower your hips to the ground and raise them back up again. Repeat for 20-30 seconds. The elbow of your supporting arm is directly under your shoulder.

Take a short break, change sides and repeat. Complete the exercise three times on each side.

**I** Intermediate level exercise

**X3** 20 – 30 seconds on each side



# SIDEWAYS BENCH RAISE AND LOWER HIP

08b



## Tips:

- When viewed from the front, your upper shoulder, hip and upper leg should be in a straight line.
- When viewed from above, the shoulders, pelvis and both knees should be in a straight line.
- Don't rest your head on your shoulder.
- Keep your pelvis stable and don't let it tilt downwards.
- Don't tilt your shoulders, pelvis or legs forwards or backwards.

## SIDEWAYS BENCH LEG LIFT

Strengthening your lateral core muscles stabilises your body. This is an advanced level exercise.

### Exercise:

Start by lying on your side with both legs straight and supporting yourself on your forearm. Now raise your pelvis and legs until your body forms a straight line from the uppermost shoulder to the uppermost foot. Only the outside of the lowermost foot remains on the ground.

Now lift your uppermost leg up and slowly lower it down again. Repeat for 20-30 seconds. The elbow of your supporting arm is directly under your shoulder. Take a short break, change sides and repeat. Complete the exercise three times on each side.

**A** Advanced level exercise

**X3** 20 – 30 seconds on each side

# SIDEWAYS BENCH LEG LIFT

08c



## Tips:

- When viewed from the front, your upper shoulder, hip and upper leg should be in a straight line.
- Your elbows should be directly under your shoulders.
- When viewed from above, the shoulders, pelvis and both knees should be in a straight line.
- Don't rest your head on your shoulder.
- Keep your pelvis stable and don't let it tilt downwards.
- Don't tilt your shoulders, pelvis or legs forwards or backwards.

# HAMSTRINGS BEGINNER, INTERMEDIATE AND ADVANCED

Strengthening your rear thigh muscles helps avoid injury.

## Exercise:

Start by kneeling on a soft surface with your knees hip-width apart and crossing your arms across your chest. Your partner kneels behind you and with both hands grips your lower legs just above the ankles, pushing them to the ground.

During this exercise, your body should be completely straight from the head to the knees. Slowly lean forwards, trying to hold the position with your hamstrings. When you can no longer hold it, gently take your weight on your hands, falling into a press-up position.

**B** 1 set of 3-5 reps

**I** 1 set of 7-10 reps

**A** 1 set of 12-15 reps

# HAMSTRINGS BEGINNER, INTERMEDIATE AND ADVANCED

09



## Tips:

- Partner keeps lower legs firmly on the ground.
- The movement is only in the knee joints.
- Don't bend at your hips.

# SINGLE LEG STANCE HOLD THE BALL

This exercise improves leg muscle coordination and balance. This is a beginner level exercise.

## Exercise:

Start by standing on one leg and holding the ball in front of you with both hands. Bend your knee and hip a little so your upper body leans slightly forwards.

Now hold your raised leg slightly behind your supporting leg. Keep your balance and hold your bodyweight on the ball of your foot for 30 seconds. Change legs and repeat.

This exercise can be made more difficult by lifting your heel slightly off the ground, or passing the ball around your waist and/or under your other knee.

Complete two sets of the exercise on each leg.

**B**

Beginner level exercise

**X2**

30 seconds on each leg

# SINGLE LEG STANCE HOLD THE BALL

10a



## Tips:

- When viewed from the front, your hip, knee and foot of your supporting leg should be in a straight line.
- Always keep the hip and knee of your supporting leg slightly bent.
- Keep your weight on the ball of your foot.
- Keep your upper body stable and facing forwards.
- Keep your pelvis horizontal.
- Don't let your knees buckle inwards.
- Don't let your pelvis tilt to the side.

# SINGLE LEG STANCE THROWING BALL WITH PARTNER

This exercise improves leg muscle coordination and balance. This is an intermediate level exercise.

## Exercise:

Start by standing on one leg, 2-3 metres away from your partner, with one of you holding the ball. Bend your knee and hip a little so your upper body leans slightly forwards.

Now hold your raised leg slightly behind your supporting leg. Keep your balance and hold your bodyweight on the ball of your foot for 30 seconds. Change legs and repeat.

This exercise can be made more difficult by lifting your heel slightly off the ground, or passing the ball around your waist and/or under your other knee.

Complete two sets of the exercise on each leg.

**I** Intermediate level exercise

**X2** 30 seconds on each leg



# SINGLE LEG STANCE THROWING BALL WITH PARTNER

10b



## Tips:

- When viewed from the front, your hip, knee and foot of your supporting leg should be in a straight line.
- Always keep the hip and knee of your supporting leg slightly bent.
- Keep your weight on the ball of your foot.
- Keep your upper body stable and facing forwards.
- Keep your pelvis horizontal.
- Don't let your knees buckle inwards.
- Don't let your pelvis tilt to the side.

# SINGLE LEG STANCE TEST YOUR PARTNER

This exercise improves leg muscle coordination and balance. This is an advanced level exercise.

## Exercise:

Start by standing on one leg, 2-3 metres away from your partner, with one of you holding the ball. Bend your knee and hip a little so your upper body leans slightly forwards.

Now hold your raised leg slightly behind your supporting leg. Keep your balance while you and your partner try to push the other off balance in different directions.

Continue for 30 seconds, then change legs and repeat.

**A** Advanced level exercise

**X2** 20 – 30 seconds on each leg

# SINGLE LEG STANCE TEST YOUR PARTNER

10c



## Tips:

- Always keep the hip and knee of your supporting leg slightly bent.
- Keep your weight on the ball of your foot.
- Keep your upper body stable and facing forwards.
- Keep your pelvis horizontal.
- Keep hip, knee and foot of supporting leg in a straight line.

# SQUATS WITH TOE RAISE

This exercise strengthens your hamstrings and calf muscles and improves movement control. This is a beginner level exercise.

## Exercise:

Start by standing with your feet hip-width apart and your hands on your hips.

Now slowly bend your hips, knees and ankles until your knees are flexed to 90 degrees. Lean your upper body forwards. Then straighten your upper body, hips and knees. When your knees are completely straight, stand up on your toes and then slowly lower yourself down again. Then straighten up slightly more quickly.

Repeat the exercise for 30 seconds.

**B** Beginner level exercise

**X2** 30 seconds each

# SQUATS WITH TOE RAISE

11a



## Tips:

- When viewed from the front, the hip, knee and foot of both legs should be in two straight parallel lines.
- Bend your hips, knees and ankles at the same time and lean your upper body forwards.
- Keep your back straight.
- Stand up on your toes when you straighten up.
- Keep your pelvis horizontal.
- Don't let your knees buckle inwards.
- Don't tilt your head backwards.

# SQUATS WALKING LUNGES

Walking lunges strengthen your hamstrings and gluteal muscles and improve your movement control. This is an intermediate level exercise.

## Exercise:

Start by standing with your feet hip-width apart and your hands on your hips.

Now lunge forwards slowly at an even pace. As you lunge, bend your hips and knees until your leading knee is flexed to 90 degrees. Your bent knee should not extend beyond the toes. Keep your upper body straight and your pelvis horizontal.

Do 10 lunges on each leg.

I Intermediate level exercise

X2 10 lunges on each side



## Tips:

- Bend your leading knee to 90 degrees.
- Keep your upper body upright.
- Keep your pelvis horizontal.
- Your bent knee should not extend beyond your toes.
- Don't let your leading knee buckle inwards.
- Don't bend your upper body forwards.
- Don't twist or tilt your pelvis to the side.

# SQUATS ONE-LEG

One-leg squats strengthen your front thigh muscles and improve your movement control. This is an advanced level exercise.

## Exercise:

Start by standing on one leg next to your partner so that you can both loosely hold on to each other. Hold your raised leg slightly behind the supporting leg.

Now bend your knee at the same time as your partner. Slowly bend your knee to 90 degrees if possible and straighten up again. Bend your knee slowly then straighten it slightly more quickly.

Repeat the exercise on the other side, doing 10 squats on each leg.



Advanced level exercise



10 on each side





## Tips:

- When viewed from the front, the hip, knee and foot of your supporting leg should be in a straight line.
- Lean your upper body slightly forwards and keep it stable and facing forwards.
- Keep your pelvis horizontal.
- Bend your knee slowly then straighten it slightly more quickly.
- Don't let your knees buckle inwards.
- Your bent knee should not extend beyond your toes.
- Don't twist or tilt your pelvis to the side.

# JUMPING VERTICAL JUMPS

This exercise improves your jumping power and movement control. This is a beginner level exercise.

## Exercise:

Start by standing with your feet hip-width apart and your hands on your hips.

Now slowly bend your hips, knees and ankles until your knees are flexed to 90 degrees. Lean your upper body forwards. Hold this position for one second then jump as high as you can. While you jump, straighten your whole body. Land softly on the balls of your feet and slowly bend your hips, knees and ankles as far as possible.

Repeat for 30 seconds.

**B** Beginner level exercise

**X2** 30 seconds each



## Tips:

- When viewed from the front, the hip, knee and foot of both legs should be in two straight parallel lines.
- Bend the hips, knees and ankles at the same time and lean your upper body forwards.
- Jump off both feet and land gently on the balls of your feet.
- A cushioned landing and a powerful take-off are more important than how high you jump.
- Don't let your knees buckle inwards.
- Don't land with extended knees or on your heels.

# JUMPING LATERAL JUMPS

This exercise improves your jumping power and movement control on one leg. This is an intermediate level exercise.

## Exercise:

Start by standing on one leg. Bend your hips, knee and ankle slightly and lean your upper body forwards.

Jump approximately one metre to the side from your supporting leg onto your other leg. 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 onto the other leg. Keep your upper body stable and facing forwards and your pelvis horizontal.

Repeat for 30 seconds.

I Intermediate level exercise

X2 30 seconds each

# JUMPING LATERAL JUMPS

12b



## Tips:

- When viewed from the front, your hip, knee and foot should be in a straight line.
- Land gently on the balls of your feet, bend the hip, knee and ankle at the same time and lean your upper body forwards.
- Keep your upper body stable and facing forwards.
- Keep your pelvis horizontal.
- Don't let your knee buckle inwards.
- Don't turn your upper body.
- Don't twist or tilt your pelvis to the side.

# JUMPING BOX JUMPS

Box jumps improve body stability through quick movements in different directions. This is an advanced level exercise.

## Exercise:

Start by standing with feet hip-width apart and imagine there is a cross marked on the ground under you.

Now bend your hips, knees and ankles and from this position alternate between jumping forwards and backwards, from side to side, and diagonally. Jump as quickly and explosively as possible but land gently on the balls of your feet and bend your hips, knees and ankles. Lean your upper body forwards slightly throughout the exercise.

Repeat the exercise for 30 seconds.

**A** Advanced level exercise

**X2** 30 seconds each



## Tips:

- When viewed from the front, the hip, knee and foot of both legs should be in two straight parallel lines.
- Jump off both feet and land on the balls of your feet with feet hip-width apart.
- Bend your hips, knees and ankles on landing.
- A cushioned landing and a powerful take-off are more important than how high you jump.
- Never let your knees meet and don't let them buckle inwards.
- Don't land with extended knees on your heels.







# PART 3

# RUNNING

**13** ACROSS THE PITCH

**14** BOUNDING

**15** PLANT AND CUT



# RUNNING ACROSS THE PITCH

Running across the pitch is a quick cardio warm up that can help prevent injury.

## Exercise:

Run about 30 metres across the pitch at about 75-80% effort and then jog the rest of the way. Make sure you keep your upper body straight. Your hips, knees and feet should be aligned. Jog back to the starting point at an easy pace.

Do the exercise twice.



Do the exercise twice



Game day exercise



## Tips:

- Make sure you keep your upper body straight.
- Your hips, knees and feet should be aligned.
- Don't let your knees buckle inwards.

# RUNNING BOUNDING

A great way to dynamically warm up your legs before a game or physical activity.

## Exercise:

Take a few warm up steps then take 6 to 8 bounding steps with a high knee-lift and jog the rest of the way. With each bound, try to lift the knee of the leading leg as high as possible and swing the opposite arm across the body. Jog back at an easy pace to recover.

Do the exercise twice.



Do the exercise twice.



Game day exercise



## Tips:

- Make sure you keep your upper body straight.
- Land on the ball of the leading foot with the knee bent and spring.
- Don't let your knees buckle inwards.

# RUNNING PLANT AND CUT

Plant and cut can be used to help your body prepare for the same movements in a game or physical activity.

## Exercise:

Jog 4 to 5 steps straight ahead. Then plant on the right leg and cut to change direction to the left and accelerate again.

Sprint for 5 to 7 steps at about 80-90% of maximum pace. Then decelerate and plant on the left foot and cut to change direction to the right. Don't let your knees buckle inwards.

Repeat the exercise until you reach the other side of the pitch, then jog back and repeat a second time.



Do the exercise twice



Game day exercise





## Tips:

- Make sure you keep your upper body straight.
- Your hips, knees and feet should be aligned.
- Don't let your knees buckle inwards.





# TEAMS THAT PREPARE WELL, PLAY WELL

Join us and coach your athletes to warm up smart. The ACC SportSmart warm up team will show you how it's done.

### **ACC SportSmart warm up references:**

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