FOOTY FIRST

A training program to prevent leg injuries in community Australian Football

FootyFirst is designed to reduce leg injuries in community football. It is based on the latest and best scientific evidence.










Introduction

As an AFL coach, I am acutely aware of the need to prepare my players for the rigours of playing elite level football.

To win the ultimate prize, players need to play at their maximum physical capability and to remain injury-free – every time a player can't take the field, the chance of the team performing well and winning matches is reduced.

Every coach, no matter what level of football they are involved in, has a responsibility to make sure their players are well prepared when they take the field. This responsibility is not only in the short-term and about winning and losing games, though of course that is important. Equally important, in the longer term, is making sure that the risk of injuries is minimised for all players. Injuries sustained playing football can have a profound impact on individuals for the rest of their lives – just talk to anyone who has suffered a serious ankle or knee injury while playing football.

FootyFirst is an exercise training program that has been developed specifically to reduce the risk of leg injuries in community football. It is based on the latest and best scientific evidence.

If you only have a short time to work with your players and you are looking for a warm-up, strength and conditioning program that will help your team in the short term and your players in the long term, I highly recommend you think about implementing FootyFirst properly and consistently at your club.



Chris Scott
AFL Premiership Coach 2011
Geelong Football Club

Acknowledgements

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FootyFirst was developed after consultation with members of the AFL Medical Officers Association, the AFL Physiotherapists Association and the AFL Sports Science Association. All three organisations have endorsed this exercise training program.

* NoGAPS is the National Guidance for Australian Football Partnerships and Safety Project.

"The AFL Medical Officers Association believes FootyFirst has the potential to reduce the risk of leg injuries for community football players and lead to improved individual and team performance. FootyFirst is based on the latest available research and is similar to the programs used in AFL clubs but modified to suit the needs, context and abilities in community football. The AFL Medical Officers Association highly recommends FootyFirst to all community football coaches and players. This is the type of training program that will ensure you get the most out of your players."

– AFL Medical Officers Association (September 2011)

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How to use FootyFirst

FootyFirst should be part of all training sessions. It should be completed at least twice a week.

FootyFirst begins with a warm-up, followed by leg strengthening and conditioning exercises, and training to improve balance, landing and side-stepping skills.

Once players and coaches are familiar with the exercises, the warm-up should take about 5 minutes, and the strength and conditioning exercises and jumping, landing and changing direction activities about 15 minutes.

Performed correctly and frequently, FootyFirst will improve performance and reduce injury risk. It will improve players' leg strength and control – from their hip to hamstring, groin to thigh, lower leg, knee, ankle and foot.

Players should do the FootyFirst exercises throughout the pre-season and in-season.

Logistics

The warm-up should take about 5 minutes and the strength and conditioning exercises and jumping, landing and changing direction activities about 15 minutes.

Ideally, do the FootyFirst exercises on a grass football field before every regular training session. They can be done indoors if a suitable venue with a non-slip floor is available. A basketball court or other 'forgiving' surface (e.g. a sprung wooden floor) is most suitable. Always inspect for hazards that could compromise player safety.

Players can do the warm-up as a group. The rest of the FootyFirst exercises should be performed individually or in pairs, and require minimal equipment.

When exercises require an effort for a time period (e.g. 5 seconds), it's best for someone other than the coach (e.g. a trainer, injured player or assistant) to time the exercise. The coach can then concentrate on monitoring exercise technique.

"The most important ability is availability"

– Tony Dungy – NFL Player and Coach

Players who do not attend training should still be encouraged to complete FootyFirst twice a week.

For players who don't attend training

To ensure FootyFirst provides maximum benefit for as many players as possible, players who do not attend club training should be encouraged to complete the program twice a week.

Ideally, they should learn the proper techniques by attending a club training session; they can then continue the program on their own.

Progress

To maximise the benefits from FootyFirst, players should begin at Level 1 and move through the levels, in order, to Level 5.

A community football player of average fitness and ability will take about four weeks (eight training sessions) to move from one level to the next. Players should only move to the next level when they have the strength, muscular endurance and flexibility to complete a level with the correct technique.

For some exercises, there are modifications that increase the challenge. These can be introduced to replace the easier versions as soon as players display good technique and are ready for a greater challenge.

As with all exercise programs, players should monitor how their body responds. If an exercise causes pain or discomfort, they should stop and either go back a level or move on to an exercise that is pain-free.

By introducing FootyFirst at your club, you can reduce the risk of leg injuries and make sure you have more players available for team selection more often.

Teaching FootyFirst

For FootyFirst to be effective, players need to use the correct technique.

When beginning new exercises, coaches should:

- ➜ Explain the purpose of each exercise and its expected benefits.
- ➜ Provide a few key teaching points.
- ➜ Demonstrate the correct technique to the whole group. Use a player to demonstrate so the coach is free to comment on the demonstration and provide teaching points.
- ➜ Get the players to practise the exercise as a group. Feedback to the whole group encourages good effort and technique, and identifies and corrects faults.
- ➜ Provide feedback to individuals if needed.

The FootyFirst strength and conditioning exercises are classified into four categories, which should be completed in order within each level:

1. Hamstring strength
2. Groin strength
3. Hip strength
4. Balance, landing and changing direction skills

To get the full benefit of FootyFirst it is important to teach and reinforce proper technique.

Players may experience muscle soreness from some exercises if they haven't done them before. As they continue to train, this should disappear.

To maximise the injury prevention and performance benefits of FootyFirst your players need to:
DO IT PROPERLY
DO IT CONSISTENTLY

Warm-up

This warm-up is needed before every FootyFirst session at every level. Players should also do football-specific warm-up activities (kicking, handballing, marking, etc) after FootyFirst to prepare for the main training session.

Recommended equipment:

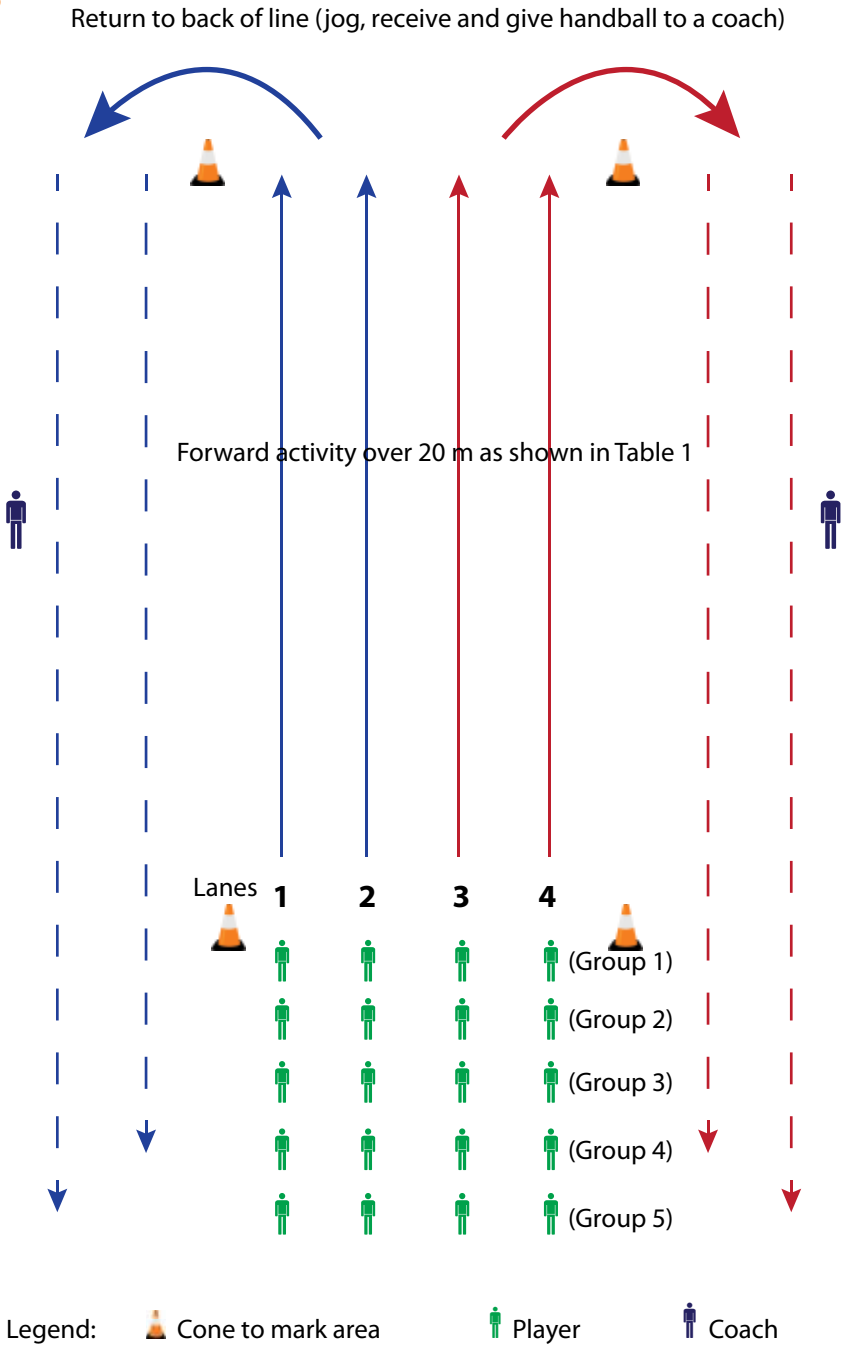
- 4 cones to mark out area (20 m long by 5–6 m wide)
- 2 footballs



Group warm-up exercises

Teaching Cues

- Line players up in groups of 4 (e.g. the 5 groups of 4 shown here).
- The table on the opposite page shows the 6 activities for this formation.
- Each group will cover the 20 m and return a total of 9 times.
- At the end cones, players in lanes 1 and 2 turn left around the cone and jog back to the beginning. Players in lanes 3 and 4 turn right around the other cone and jog back.
- As the players jog back, a coach (one on each side) handballs a ball to players one at a time. The player handballs back and continues the return trip. Do this fast enough to avoid a bottleneck of players waiting for a handball.
- Groups should follow each other with a gap of about 3 m to avoid time standing still.
- Carry out all activities at jogging pace.



Group warm-up exercises

Activity over the 20 m course	Main muscle stretched or used	Teaching Cues
1. Jog	All leg muscles	Jog
2. Side-to-side run  	Groin (hip adductors)	Facing side-on to the direction of travel, bring the feet together but do not cross them over. *Repeat facing opposite side.*
3. Carioca/Grapevine with high knees   A	Groin (hip adductors)	Facing side-on to the direction of travel, bring the back leg in front and then behind the body in an alternating fashion. When the leg is brought in front of the body, raise the knee to a high position as shown in photo A. *Repeat facing opposite side.*
4. Backward running with high feet 	Hamstrings	Jogging backwards, bring the feet up so they get close to the buttocks before planting on the ground behind the body.
5. Butt kicks (2 reps) 	Quadriceps (thigh) and hamstrings	Jogging forward with an arm action like normal running, keep the thighs vertical (no knee lifts) and bring the heels up towards the buttocks, but not touching. In the second repetition, bend the knee forcefully enough so that the heels make contact with the buttocks.
6. Hands to ground 	Hamstrings and lower back	While jogging, touch both hands on the ground as if picking up a ball. Immediately straighten up to a normal running posture. Jog a few metres and repeat. Do this 4 times over the 20 m. Avoid twisting to the side when bending over.

Dynamic stretches

Exercise	Teaching Cues
Calf stretch (Straight leg) **5 reps each leg**  	➜ Slowly straighten one leg until the heel touches the ground. As soon as the stretched position is reached, bend the knee to release the stretch and at the same time straighten the other leg. ➜ If the player cannot get his heels to touch the ground, lower the heels as far as possible without pain. ➜ This exercise can also be done leaning against a fence or partner for support.
Calf stretch (Bent knee) **5 reps each leg**  	➜ The same as the stretch above but when the heel is pushed down, always keep the knee in a bent position. ➜ This exercise can also be done leaning against a fence or partner for support.
Hip rotation **4 reps each leg**  	➜ While standing, lift the right leg up with knee bent in front of the body (photo A). Then slowly move the leg outward making a big circle with the knee (photo B). Repeat to a total of 4 repetitions. ➜ Repeat with the left leg.

Dynamic stretches

Exercise	Teaching Cues
Leg swings **A: Forward (6 reps each leg)**  **B: Across body (6 reps each leg)** 	**A:** ➜ a) Swing one leg back behind the body and then forward (like a kicking action but with the leg as straight as possible the whole time). ➜ Swing the leg with control and reach a height so that a stretch is felt in the hamstrings (back of the thigh) without pain. **B:** ➜ Swing the leg to the side and then across the front of the body. ➜ Swing the leg with control and reach a height so that a stretch is felt in the groin (inside of the thigh) without pain.
Walking lunge **8 lunges in total** 	➜ While taking large walking steps, allow the body to drop until the back knee is just off the ground. Keep the trunk vertical and the heel of the front foot on the ground during the lunge. Control the lunge. The knee should finish over the toes (see photo). ➜ Lunge forward with alternating legs until the 8 reps are completed.

1. HAMSTRING STRENGTH

Hamstring lower

Strengthens the hamstring muscles on the back of the thigh to help prevent hamstring injuries.

RECOMMENDED EQUIPMENT

On a hard surface, each pair of players may need a mat under their knees.



TEACHING CUES



➜ Player kneels with a partner holding his ankles



➜ With hands by the side, player slowly leans forward from the knees; keep the body as straight as possible for as long as possible before falling forward onto the hands



➜ To get back to the start position, push up with the hands rather than using the hamstrings

6 reps

Because this exercise uses body weight as resistance, the slower the player performs the exercise, the harder they are working. Although there are not many repetitions, players should go gently at first to minimise muscle soreness.

COMMON FAULTS



Bent at the hips

Arched back



Key points

- ☑ *The partner should firmly anchor the player's feet at the ankles*
- ☑ *The player's head, trunk, hips and knees should form a straight line*
- ☒ *Do not bend at the hips*
- ☒ *Do not arch the back or neck*

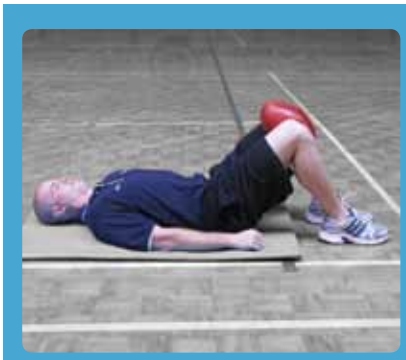
2. GROIN STRENGTH

Ball squeeze

Strengthens the groin muscles. Poor groin muscle strength has been associated with groin injuries.

RECOMMENDED EQUIPMENT

A football for each player or pair of players.



5 reps

- Lie on the back with the knees bent to about a 90° angle
- Place a ball between the knees
- Squeeze the knees together as if trying to squash the ball
- Exercise Tempo – 2-2-2 (2 second contraction, 2 second hold, 2 second release)
- Do 5 repetitions with 5 second rest between repetitions
- Repeat with the legs straight and the ball between the knees



5 reps

TEACHING CUES

Key points

☑ *Build up to full strength squeeze over 2 seconds*

☒ *Do not squeeze hard too quickly*

☒ *Do not point toes inwards – do not internally rotate the hips*

3. HIP STRENGTH

Side plank

Strengthens the side muscles of the hips, pelvis and trunk. These muscles control the pelvis and thigh. Good control of leg and pelvis in relation to the trunk can reduce knee and groin injuries.

RECOMMENDED EQUIPMENT

On a hard surface, place a mat under the forearm.



TEACHING CUES





- ➜ Lie on the side with one leg on top of the other; distribute the body weight evenly over the forearm
- ➜ Raise the hips and the top arm simultaneously to achieve a straight body
- ➜ Exercise Tempo – 2-2-2 (i.e. 2 seconds to raise, 2 second hold, 2 seconds to lower)
- ➜ Hold raised position for 2 seconds
- ➜ Lower arm and hips to floor simultaneously
- ➜ Repeat on the other side

5 reps each side

COMMON FAULTS



Hips too high



Hips too low



Bent at the hips

Key points

- ☑ *Try to be a 'plank'*
- ☑ *Raise the arm at the same time as raising the hips*
- ☑ *Keep the head, shoulders, trunk, hips and knees in a straight line*
- ☒ *Do not hold raised position for longer than the correct body form can be maintained*
- ☒ *Do not roll shoulders forward or back*
- ☒ *Do not bend at the hips*

4. BALANCE, LANDING AND CHANGING DIRECTION

Single leg balance

Improves landing technique, neuromuscular control and balance to help prevent knee and ankle injuries.

RECOMMENDED EQUIPMENT

A football for each pair of players.



- Two players stand about 3 m apart, both balancing on one leg
- Players handball to each other while maintaining balance
- Perform 12 handballs, alternating hands (6 right hand, 6 left hand)
- Repeat while balancing on the other leg

12
reps each leg



TEACHING CUES

Key points

☑ *Maintain balance at all times*

☒ *Do not allow non-balance foot to touch the ground*

4. BALANCE, LANDING AND CHANGING DIRECTION

Single leg shallow squat

Improves landing technique, neuromuscular control and balance to help prevent knee and ankle injuries.

RECOMMENDED EQUIPMENT

A football for each player or pair of players.

TEACHING CUES



- Two players stand about 1 m apart both balancing on one leg with one hand on each other's shoulder
- Both players perform shallow (>90°) single leg squats at the same time



- Players move about 3 m apart, balance on one leg and perform single leg squat

6 reps each leg

x 3 exercises



- Players both balance on one leg, facing each other, and do a single leg squat after receiving a handball from their partner
- 6 handballs, alternating hands (3 right and 3 left hand)
- Repeat on the other leg

Key points

- ☑ *Aim the knee to the little toe to ensure the knee takes the correct path*
- ☑ *Keep the knee in line with toes*
- ☒ *Do not let the knee move sideways – no lateral or mid-line movement*
- ☒ *Do not let the knee go out further than the toes – do not bend the ankle too much*
- ☒ *Do not squat too deeply – never let the angle at the knee be <90°*

LEVEL 2

FOOTY FIRST










1. HAMSTRING STRENGTH

Hamstring lower

Strengthens the hamstring muscles on the back of the thigh to help prevent hamstring injuries.

RECOMMENDED EQUIPMENT

On a hard surface, each pair of players may need a mat under their knees.



TEACHING CUES



➜ Player kneels with a partner holding his ankles



➜ With hands by the side, player slowly leans forward from the knees; keep the body as straight as possible for as long as possible before falling forward onto the hands



➜ To get back to the start position, push up with the hands rather than using the hamstrings

2 sets x 5 reps

COMMON FAULTS



Bent at the hips

Arched back



Key points

- ☑ *The partner should firmly anchor the player's feet at the ankles*
- ☑ *The player's head, trunk, hips and knees should form a straight line*
- ☒ *Do not bend at the hips*
- ☒ *Do not arch the back or neck*

2. GROIN STRENGTH

Side lying leg lift

Strengthens the groin muscles. Poor groin muscle strength has been associated with groin injuries.

RECOMMENDED EQUIPMENT

On a hard surface, each pair of players may need a mat.



TEACHING CUES

- ➜ Lie on the side with the top leg bent at the hip and knee
- ➜ Lift bottom leg slowly off the ground, hold at highest point, then lower it slowly to the ground
- ➜ Exercise Tempo – 2-2-2 (2 seconds to lift, 2 seconds to hold and 2 seconds to lower)

3 sets X 5 reps each leg





COMMON FAULTS

Bent at the hips



Key points

- ☑ *Keep the head, shoulders, trunk, hips and knees in a straight line*
- ☑ *Perform slowly, with control*
- ☒ *Do not lift leg forward*
- ☒ *Do not rotate body forward or backward*
- ☒ *Do not bend at the hips*

3. HIP STRENGTH

Side plank lift and lower hips

Strengthens the side muscles of the hips, pelvis and trunk. These muscles control the pelvis and thigh. Good control of leg and pelvis in relation to the trunk can reduce knee and groin injuries.

RECOMMENDED EQUIPMENT

On a hard surface, place a mat under the forearm.



TEACHING CUES

- Lie on the side with one leg on top of the other; distribute the body weight evenly over the forearm
- Slowly lift the hips to achieve a straight body
- Slowly lower the hips to the ground
- Exercise Tempo – 2-2 (2 seconds to lift and 2 seconds to lower).
- 5 repetitions
- Repeat on the other side
- 2 sets on each side, with a 5 second rest between sets

2 sets x 5 reps each side



Start position



Finish position

(Note straight line from feet to head)

COMMON FAULTS



Hips too high

Hips too low



Key points

- ☑ *Try to be a 'plank'*
- ☑ *Keep the head, shoulders, trunk, hips and knees in a straight line*
- ☒ *Do not roll shoulders forward or back*
- ☒ *Do not bend at the hips*

4. BALANCE, LANDING AND CHANGING DIRECTION

A: Jump forward and land on one leg

Improves landing technique, neuromuscular control and balance to help prevent knee and ankle injuries.

RECOMMENDED EQUIPMENT

None needed.

- Stand on the right foot, jump forward and land on the left foot
- Start with a small jump and slowly increase jumping distance while maintaining control and landing technique
- Emphasise 'sticking' the landing with balance and control
- After a brief pause, stand on the left foot, jump forward and land on the right foot
- Do 20 jumps (10 from each leg), alternating takeoff and landing legs

20 jumps alternating legs





TEACHING CUES

B: Jump backward and land on one leg

- Stand on the right foot, jump backward and land on the left foot
- Start with a small jump and slowly increase jumping distance while maintaining control and landing technique
- Emphasise 'sticking' the landing with balance and control
- After a brief pause, stand on the left foot, jump backward and land on the right foot
- Do 20 jumps (10 from each leg), alternating takeoff and landing legs

20 jumps alternating legs

TEACHING CUES

4. BALANCE, LANDING AND CHANGING DIRECTION

To increase the challenge, when ready:

- ➜ Jump further and higher while always concentrating on the landing technique.
- ➜ Perform 10 forward hops – jumping and landing on the same leg – on each leg followed by 10 backward hops on each leg.

COMMON FAULTS



Landing knee inward



Knee inward, trunk to side



Trunk leaning too far forward



Landing leg too straight

Key points

☑ ***Stay balanced***

When landing:

☑ ***Bend the knee on impact to achieve a 'soft' landing***

☑ ***Aim the knee to the little toe to ensure the knee takes the correct path***

☑ ***Keep the knee in line with toes***

☑ ***Keep the trunk facing forward***

☒ ***Do not let the knee move sideways – no lateral or mid-line movement***

☒ ***Do not let the knee go out further than the toes – do not bend the ankle too much***

☒ ***Do not bend the knee too deeply – never let the angle at the knee be <90°***

LEVEL 3

FOOTY FIRST










1. HAMSTRING STRENGTH

Hamstring lower

Strengthens the hamstring muscles on the back of the thigh to help prevent hamstring injuries.

RECOMMENDED EQUIPMENT

On a hard surface, each pair of players may need a mat under their knees.



TEACHING CUES



➜ Player kneels with a partner holding his ankles



➜ With hands by the side, player slowly leans forward from the knees; keep the body as straight as possible for as long as possible before falling forward onto the hands



➜ To get back to the start position, push up with the hands rather than using the hamstrings

2 sets x 8 reps

COMMON FAULTS



Bent at the hips

Arched back



Key points

- ☑ *The partner should firmly anchor the player's feet at the ankles*
- ☑ *The player's head, trunk, hips and knees should form a straight line*
- ☒ *Do not bend at the hips*
- ☒ *Do not arch the back or neck*

2. GROIN STRENGTH

Running man

Strengthens the groin muscles. Poor groin muscle strength has been associated with groin injuries. This exercise also enhances the strength and control of the hip and knee, which is important to prevent injuries during landing or changing direction.

RECOMMENDED EQUIPMENT

None needed.

- ➜ Stand on one leg with one arm raised above the head (photo A)
- ➜ Keep the heel on the ground; do not let the other foot touch the ground
- ➜ Squat, while keeping the heel on the ground
- ➜ Lower the raised arm so both arms are down (photo B)
- ➜ Rise from the squat and raise the other arm over head (photo C)
- ➜ Exercise Tempo – 2-2 (2 seconds down – 2 seconds up)
- ➜ Continue squatting on the same leg while alternating arms for 15 repetitions
- ➜ Repeat on the other leg
- ➜ Complete 2 sets of 15 repetitions on each leg; rest for 10 seconds between each set



- ➜ To increase the challenge, when ready, perform the movements faster, while still concentrating on balance.

2 sets x 15 reps on each leg

TEACHING CUES

Key points

- ☑ *Focus on balance, good knee control and range of movement, not speed*
- ☑ *Keep the arms straight throughout the exercise*
- ☑ *Keep body, particularly hips, aligned*
- ☑ *Keep the knee over the foot when bending*
- ☑ *Extend the bottom arm as far back as possible*
- ☑ *Stop and start again if you become uncoordinated*
- ☒ *Do not allow body to move sideways excessively*
- ☒ *Do not raise the heel of the balancing foot off the ground*
- ☒ *Do not let hips drop*
- ☒ *Do not let the knee move sideways – no lateral or mid-line movement*
- ☒ *Do not let the knee go out further than the toes – do not bend the ankle too much*
- ☒ *Do not squat too deeply – never let the angle at the knee be <90°*

3. HIP STRENGTH

Side plank side-to-side

Strengthens the side muscles of the hips, pelvis and trunk. These muscles control the pelvis and thigh. Good control of leg and pelvis in relation to the trunk can reduce knee and groin injuries.

RECOMMENDED EQUIPMENT

On a hard surface, place a mat under the forearm.



TEACHING CUES

- ➜ Start in a front plank position with the weight resting evenly on the forearms (photo A); hold for 1 second.
- ➜ Roll to the side position (photo B); hold for 1 second
- ➜ Roll again back to the front (photo C); hold for 1 second
- ➜ Roll to the other side (photo D); hold for 1 second
- ➜ One repetition is completed when each of these four positions has been held for 1 second

5 reps









COMMON FAULTS



Hips too low



Hips too high

Key points

- ☑ *Try to be a 'plank'*
- ☑ *Emphasise control – maintain a straight body when rolling to a new position*
- ☑ *Keep the head, shoulders, trunk, hips and knees in a straight line*
- ☒ *Do not hold raised position for longer than the correct body form can be maintained*
- ☒ *Do not roll shoulders forward or back*
- ☒ *Do not bend at the hips*
- ☒ *Do not allow the hips to drop*

4. BALANCE, LANDING AND CHANGING DIRECTION

Single leg forward and back

Improves landing technique, neuromuscular control and balance to help prevent knee and ankle injuries. Adding the ball increases the difficulty of the task, also teaching ball skills and better control of landing.

RECOMMENDED EQUIPMENT

A football for each pair of players (when ready to increase challenge).

TEACHING CUES

- Stand on the right foot, jump forward and land on the left foot
- Raise arms as if taking a mark
- Start with a small jump and slowly increase jumping distance
- Jump back and land on the right foot
- Again raise arms as if taking a mark
- Perform *continuously* with no pause
- Complete 20 jumps (10 forward, 10 backward)
- Repeat, starting on the left foot, jumping forward and landing on the right foot

20 jumps each leg

TO INCREASE THE CHALLENGE, WHEN READY

- Jump higher and further but continue to land with balance and control
- Have a partner handball a ball and mark it while in the air during either a forward or a backward jump
- Make this harder by marking a ball handballed slightly to either side

COMMON FAULTS



Landing knee inward



Knee inward, trunk to side



Trunk leaning too far forward



Landing leg too straight

Key points

- ☑ *Bend the knee on impact to achieve a 'soft' landing*
- ☑ *Aim the knee to the little toe to ensure the knee takes the correct path*
- ☑ *Keep the knee in line with toes*
- ☑ *Keep the trunk facing forward*
- ☑ *When jumping backward, make sure the knee bends and the heel touches the ground when landing*
- ☑ *Look up and raise arms as if taking a mark*
- ☒ *Do not rush or lose control*
- ☒ *Do not let the other foot touch the ground*

When landing:

- ☒ *Do not let the knee move sideways – no lateral or mid-line movement*
- ☒ *Do not let the knee go out further than the toes – do not bend the ankle too much*
- ☒ *Do not bend the knee too deeply – never let the angle at the knee be <90°*
- ☒ *Do not twist or fall to the side*

Run forward, jump and land

Improves landing technique, neuromuscular control and balance to help prevent knee and ankle injuries.

RECOMMENDED EQUIPMENT

A football for each pair of players (when ready to increase challenge).

TEACHING CUES

- Using a 3-step run-up, jump off one leg directly ahead, as if mimicking marking a ball, and land on the other leg
- 20 jumps (10 each leg) alternating legs

10 jumps each leg





TO INCREASE THE CHALLENGE, WHEN READY

- Lengthen the run-up and jump further while concentrating on correct landing technique
- Have a partner handball a ball and mark it while in the air
- Have a partner handball a ball slightly to either side

COMMON FAULTS



Landing knee inward



Knee inward, trunk to side



Trunk leaning too far forward



Landing leg too straight

Key points

- ☑ *Stay balanced*

When landing:

- ☑ *Bend the knee on impact to achieve a 'soft' landing*
- ☑ *Aim the knee to the little toe to ensure the knee takes the correct path*
- ☑ *Keep the knee in line with toes*
- ☑ *Keep the trunk facing forward*
- ☒ *Do not let the knee move sideways – no lateral or mid-line movement*
- ☒ *Do not let the knee go out further than the toes – do not bend the ankle too much*
- ☒ *Do not bend the knee too deeply – never let the angle at the knee be <90°*

LEVEL 4

FOOTY FIRST










1. HAMSTRING STRENGTH

Hamstring lower

Strengthens the hamstring muscles on the back of the thigh and helps prevent hamstring injuries.

RECOMMENDED EQUIPMENT

On a hard surface, each pair of players may need a mat under their knees.



TEACHING CUES



➜ Player kneels with a partner holding his ankles



➜ With hands by the side, player slowly leans forward from the knees; keep the body as straight as possible for as long as possible before falling forward onto the hands



➜ To get back to the start position, push up with the hands rather than using the hamstrings

➜ Do 1 set x 10 repetitions then swap with the partner for 1 set; repeat

2 sets x 10 reps

COMMON FAULTS



Bent at the hips

Arched back



Key points

- ☑ *The partner should firmly anchor the player's feet at the ankles*
- ☑ *The player's head, trunk, hips and knees should form a straight line*
- ☒ *Do not bend at the hips*
- ☒ *Do not arch the back or neck*

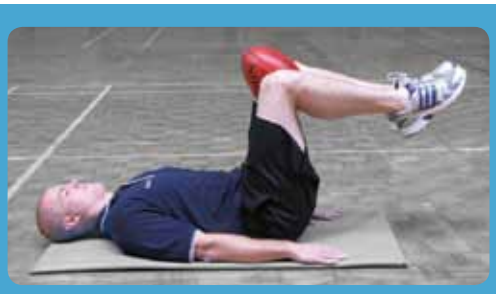
2. GROIN STRENGTH

Squeeze with leg lift

Strengthens the groin muscles. Poor groin muscle strength has been associated with groin injuries.

RECOMMENDED EQUIPMENT

A football for each pair of players.



- Lie on the back with feet on the ground
- Place a ball between the knees
- Lift the feet off the ground until the hips and knees are at 90° angles
- Squeeze the knees together as if trying to squash the ball
- Exercise tempo – 2-2-2 (2 second contraction, 2 second hold, 2 second release)
- Do 5 repetitions; rest for 3 seconds between repetitions



When ready to increase the challenge

- Do the same exercise with the legs straight. Place the ball between the knees and the feet about ½ m off the ground. Use the abdominal muscles to prevent the lower back arching excessively.

5 reps

TEACHING CUES

Feet and knees dropped too low (angle at hip >90°)



COMMON FAULTS

Key points

- ☑ *Squeeze hard enough to hold ball between the legs*
- ☑ *Maintain good lower back control*
- ☒ *Do not allow knees or feet to drop too low*
- ☒ *Do not allow lower back to arch excessively*
- ☒ *Do not squeeze hard too quickly*
- ☒ *Do not point toes inwards – do not internally rotate the hips*

3. HIP STRENGTH

Side plank with arm & leg lift

Strengthens the side muscles of the hips, pelvis and trunk. These muscles control the pelvis and thigh. Good control of leg and pelvis in relation to the trunk can reduce knee and groin injuries.

RECOMMENDED EQUIPMENT

On a hard surface, place a mat under the forearm.



TEACHING CUES

- ➜ Lie on the side with one leg on top of the other; distribute the body weight evenly over the forearm
- ➜ Lift the hips to achieve a straight body and raise the arm at the same time
- ➜ Raise the top leg about ½ m and hold for 5 seconds
- ➜ Lower the top leg, hips and arm
- ➜ Complete 5 repetitions; rest for 3 seconds between repetitions
- ➜ Repeat on the other side

5 reps each side





COMMON FAULTS



Hips too low

Bent at the hips



Key points

- ☑ *Try to be a 'plank'*
- ☑ *Raise the arm at the same time as raising the hips*
- ☑ *Keep the head, shoulders, trunk, hips and knees in a straight line*
- ☒ *Do not hold raised position for longer than the correct body form can be maintained*
- ☒ *Do not roll shoulders forward or back*
- ☒ *Do not bend at the hips*
- ☒ *Do not allow the hips to drop*

4. BALANCE, LANDING AND CHANGING DIRECTION

Run, jump to the side and land

Improves landing technique, neuromuscular control and balance to help prevent knee and ankle injuries. Adding the ball increases the difficulty of the task, also teaching ball skills and better control of landing.

RECOMMENDED EQUIPMENT

A football for each pair of players (when ready to increase challenge).

- Using a 3-step run-up, jump off the right leg to the *left* side (about 45° to line of the run-up) and land on the left leg (see diagram below)
- Start with a small jump and slowly increase jumping distance while maintaining control and good landing technique
- Perform 10 jumps
- Repeat 10 jumps off the left leg to the *right* side, and land on the right leg

When ready to increase the challenge

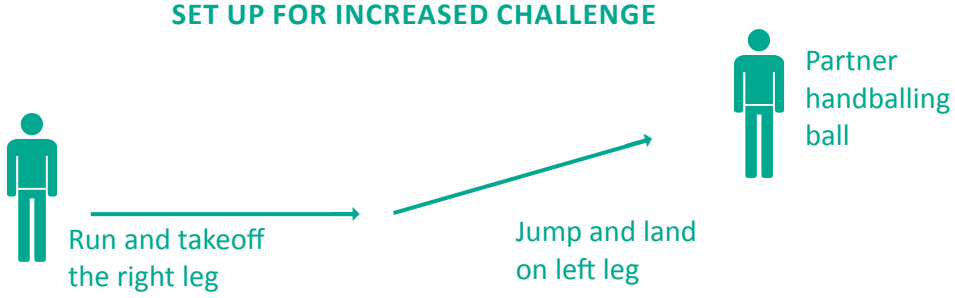
- Lengthen the run-up and jump further (continue to emphasise control and correct landing technique)
- Have a partner handball a ball so that the player has to mark the ball in the air (see diagram below)
- Have a partner handball the ball slightly to either side



10 jumps each leg

TEACHING CUES

SET UP FOR INCREASED CHALLENGE



COMMON FAULTS



Landing knee inward



Knee inward, trunk to side



Trunk leaning too far forward



Landing leg too straight

Key points

☑ *Stay balanced*

When landing:

☑ *Bend the knee on impact to achieve a 'soft' landing*

☑ *Aim the knee to the little toe to ensure the knee takes the correct path*

☑ *Keep the knee in line with toes*

☑ *Keep the trunk facing forward*

☒ *Do not let the knee move sideways – no lateral or mid-line movement*

☒ *Do not let the knee go out further than the toes – do not bend the ankle too much*

☒ *Do not bend the knee too deeply – never let the angle be <90°*

4. BALANCE, LANDING AND CHANGING DIRECTION

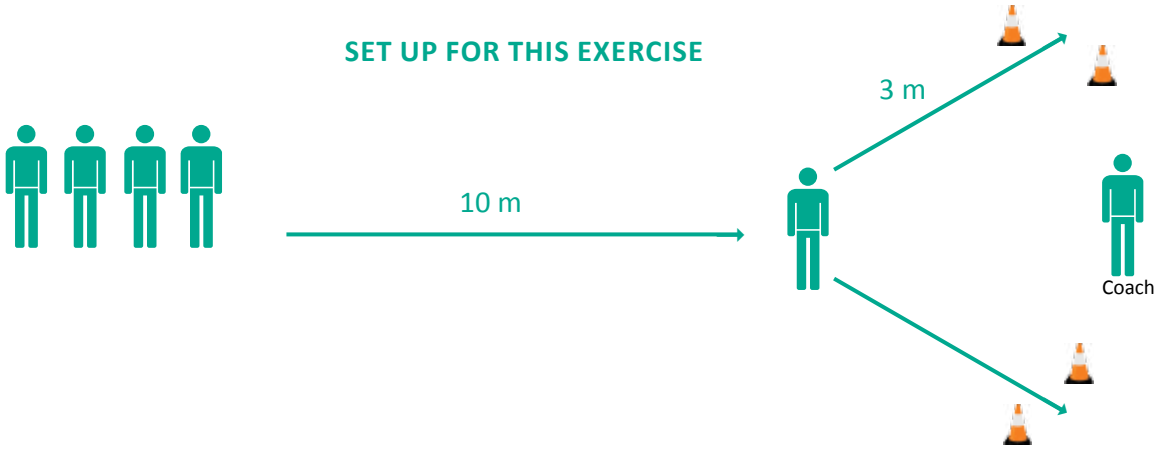
Pre-planned changing direction

Teaches players to side-step and respond to external stimuli in a way that will lower the risk of knee and ankle injuries.

RECOMMENDED EQUIPMENT

Four cones, placed as shown in the diagram.

SET UP FOR THIS EXERCISE



- A group of players line up facing a stationary person about 10 m away
- The first player in the line runs toward the stationary person and when about 2 m away, performs a side-step or 'cut' to the left and continues running between the cones about 3 m away (2 cones about 1 m apart). The new running direction should be about 45° from the original forward run.
- Each player follows immediately after the previous player runs between the cones. If more coaches are available to monitor technique, multiple stations can be set up to save time.
- Each player performs 20 side-steps in total, alternating between cutting to the left and the right



10 side-steps on each side

Good side-step technique:

- Plant foot close to midline of body
- Trunk upright
- Knee bent when planting foot



TEACHING CUES

TO INCREASE THE CHALLENGE, WHEN READY: ➜ Perform the change of direction from a faster run-up.

COMMON FAULTS



Foot planted too wide

Too much trunk lean



Key points

- ☑ *Plant foot close to midline of body*
- ☑ *Push off with the outside leg (the left leg if cutting to the right and the right leg if cutting to the left)*
- ☑ *Keep trunk upright*
- ☑ *Bend knee of planted leg*
- ☑ *Maintain an upright body facing in the direction of travel*
- ☒ *Do not plant the foot too wide*
- ☒ *Do not lean trunk excessively*

LEVEL 5

FOOTY FIRST










1. HAMSTRING STRENGTH

Hamstring lower

Strengthens the hamstring muscles on the back of the thigh and helps prevent hamstring injuries.

RECOMMENDED EQUIPMENT

On a hard surface, each pair of players may need a mat under their knees.



TEACHING CUES



➜ Player kneels with a partner holding his ankles



➜ With hands by the side, slowly lean forward from the knees; keep the body as straight as possible for as long as possible before falling forward onto the hands



➜ To get back to the start position, push up with the hands rather than using the hamstrings

➜ Do 1 set x 12 repetitions then swap with the partner for 1 set; repeat.

2 sets x 12 reps

COMMON FAULTS



Bent at the hips

Arched back



Key points

- ☑ *The partner should firmly anchor the player's feet at the ankles*
- ☑ *The player's head, trunk, hips and knees should form a straight line*
- ☒ *Do not bend at the hips*
- ☒ *Do not arch the back or neck*

2. GROIN STRENGTH

Body lift

Strengthens the groin muscles. Poor groin muscle strength has been associated with groin injuries.

RECOMMENDED EQUIPMENT

On a hard surface, each pair of players may need a mat.







- ➜ Lie on side
- ➜ Lift top leg up to partner (about ½ m), so they can hold it around the ankle
- ➜ Lift bottom leg slightly off the ground (2 seconds)
- ➜ Raise hips about 10 cm off the ground using the muscles on the inside of the top leg to push down against partner's hands (2 seconds)
- ➜ Hold raised position (2 seconds)
- ➜ Lower hips and bottom leg down (2 seconds)

TEACHING CUES

- ➜ Do 3 repetitions on one leg with a 1 second rest between reps. Then perform 3 repetitions on the other leg.
- ➜ Perform 3 sets of 3 reps on each leg, building up to 3 sets of 5 repetitions each leg

3 sets x 5 reps each leg

Key points

- ☑ *Start with small lifts very slowly*
- ☑ *If player can't lift all body weight try to lift as much weight as possible*
- ☑ *Keep the head, shoulders, trunk, hips and knees in a straight line*
- ☒ *Do not hold raised position for longer than the correct body form can be maintained*
- ☒ *Do not allow the hips to drop*
- ☒ *Do not bend at the hips*

3. HIP STRENGTH

Side plank side-to-side with leg lift

Strengthens the side muscles of the hips, pelvis and trunk. These muscles control the pelvis and thigh. Good control of leg and pelvis in relation to the trunk can reduce knee and groin injuries.

RECOMMENDED EQUIPMENT

On a hard surface, place a mat under the forearm.



TEACHING CUES







- ➜ Lie on side
- ➜ Raise the hips to a side plank
- ➜ Lift the top leg; hold for 5 seconds
- ➜ Lower the top leg, roll to a front plank position supported by both forearms hold; for 5 seconds
- ➜ Roll to the other side
- ➜ Raise the top leg; hold for 5 seconds
- ➜ One repetition is completed when each of these 3 positions has been held for 5 seconds

5 reps

COMMON FAULTS



Hips too low

Bent at the hips



Key points

- ☑ *Try to be a 'plank'*
- ☑ *Keep the head, shoulders, trunk, hips and knees in a straight line*
- ☑ *Emphasise control*
- ☒ *Do not hold raised position for longer than the correct body form can be maintained*
- ☒ *Do not roll shoulders forward or back*
- ☒ *Do not bend at the hips*
- ☒ *Do not allow the hips to drop*

4. BALANCE, LANDING AND CHANGING DIRECTION

Run, jump, land and recover to run

Practising jumping, landing and then continuing to run using the correct landing technique improves the neuromuscular control of crucial movement patterns to prevent knee and ankle injuries.

RECOMMENDED EQUIPMENT

A football for each group of four players.



- Using a 3-5 step run-up, jump off one leg and land on the other leg
- Run straight ahead for about 5 m after landing before returning to the end of the line of players
- Start with a small jump and slowly increase jumping distance while maintaining control and good landing technique
- Each player should follow after the previous player has completed a jump to avoid spending time standing still
- After all players have completed two jumps, the coach hand passes a ball so the player has to mark it out in front of his body while in the air
- Each player performs 16 jumps in total alternating takeoff and landing legs (8 jumps landing on the right and 8 landing on the left)

8 jumps each leg



TEACHING CUES



SET UP FOR THIS EXERCISE

Key points

☑ *Stay balanced*

When landing:

☑ *Bend the knee on impact to achieve a 'soft' landing*

☑ *Aim the knee to the little toe to ensure the knee takes the correct path*

☑ *Keep the knee in line with toes*

☑ *Keep the trunk facing forward*

☒ *Do not let the knee move sideways – no lateral or mid-line movement*

☒ *Do not let the knee go out further than the toes – do not bend the ankle too much*

☒ *Do not bend the knee too deeply – never let the angle at the knee be <90°*

TO INCREASE THE CHALLENGE, WHEN READY:

- ➜ Use a longer and faster run-up to jump further while concentrating on correct landing technique.
- ➜ Coach handballs the ball slightly to one side so the player has to jump to the side. The coach should handball the ball to the left or right randomly (see diagram below).
- ➜ When marking the ball in the air after jumping to the left or right, it is critical to turn the body so the trunk faces in the new direction of travel. The knee and foot should also point in the new direction.

SET UP OF EXCERCISE PATTERN



4. BALANCE, LANDING AND CHANGING DIRECTION

Unanticipated changing direction

Practising changing direction in response to an unpredictable cue using the correct, safe side-stepping technique will improve the neuromuscular control of side-stepping where the player is required to make 'spur of the moment' decisions. This will lower the risk of knee and ankle injuries.

Note: Players should only attempt this activity when they can perform the Level 4 pre-planned changing direction exercise with correct technique.

RECOMMENDED EQUIPMENT

A football for each pair of players.

- Two players stand facing each other about 10 m apart, one holding a ball
- Players run towards each other; after 1-3 steps, the 'attacker' (carrying the ball) side-steps to left or right (as if trying to evade an opponent)
- The 'defender' (without the ball) reacts as quickly as possible by side-stepping to the same side (as if pursuing the attacker)
- After this change of direction, the 'attacker' continues to run about 2-3 m in the new direction before gradually stopping (tackling is not necessary)
- The 'defender' should run forward with normal running steps (not shuffling) so they are required to perform a side-step to change direction
- Focus on the change of direction movement of the 'defender'
- The 'attacker' should perform 8 changes of direction to both the left and right but do these in a random order so the 'defender' has to change direction in response to an unpredictable stimulus
- The two players change roles as the 'attacker' and 'defender' so that both perform 16 side-steps as the 'defender'

TEACHING CUES



Good side-step technique:

- Plant foot close to midline of body
- Trunk upright
- Knee bent when planting foot

16 side-steps as defender



To increase the challenge, when ready:

- Players jog towards each other and, when about 2 m apart the 'attacker' side-steps to evade the 'defender', while the 'defender' changes direction in an attempt to lay either a two-handed tag or a tackle on the 'attacker'. Focus on correct side-step technique.
- Increase the run and change of direction speed. The players may need to stand further apart at the start.

COMMON FAULTS



Foot planted too wide

Too much trunk lean



Key points

- ☑ *Side-step at about 45° from the direction of the approach run*
- ☑ *Plant foot close to midline of body*
- ☑ *Push off with the outside leg (the left leg if cutting to the right and the right leg if cutting to the left)*
- ☑ *Keep trunk upright*
- ☑ *Bend knee of planted leg*
- ☑ *Maintain an upright body facing in the direction of travel*
- ☒ *Do not put plant foot too wide*
- ☒ *Do not lean trunk excessively*

Frequently asked questions about FootyFirst

Why should players do FootyFirst?

Leg injuries – particularly hamstring, knee, ankle, groin and hip injuries – are the most common injuries in community Australian Football.[1–3]

Leg injuries are often the reason players miss football training and games. They can also cause problems for players in later life, particularly knee and ankle problems such as osteoarthritis.

Will FootyFirst work?

Yes. FootyFirst has been developed by a group of Australia's leading experts in preventing leg injuries in sport. It is based on the latest scientific evidence about exercise training to prevent leg injuries in sport and has been designed specifically for community Australian Football.

FootyFirst has been reviewed by members of the AFL Sports Science Association, AFL Medical Officers Association and AFL Physiotherapists Associations. They agreed that the exercises included in FootyFirst were the right exercises to prevent leg injuries and that the progression of exercises in FootyFirst was appropriate for community Australian Football players.

A recently published meta-analysis showed that multi-intervention training programs similar to FootyFirst reduced the risk of lower limb injuries by 39%, the risk of acute knee injuries by 54%, and the risk of ankle sprain injuries by 50% in other sports including soccer, basketball and handball.[4]

When should players do FootyFirst?

FootyFirst is designed to be performed at the start of every training session, including pre-season training.

Can a player opt out of particular exercises if they have an injury history or current injury?

Yes. But they should not opt out of the whole program: they should work within their capacity.

If an existing injury is aggravated by a particular exercise or prevents a player from performing the exercise with control and good technique, then they should not do that particular exercise.

Are players more likely to get injured in regular football training if they have done FootyFirst at the start?

No. There is no evidence from similar injury prevention exercise training programs that suggests that participating in FootyFirst at the start of each football training session will increase the risk of sustaining an injury during training.

Does it matter if players don't do all the exercises in order or skip some?

Yes. FootyFirst is designed to be done as a complete program, with the exercises completed in the order in which they are presented in this manual. However, if a player misses an exercise, they should come back to it at another time later in the training session rather than leave it out completely.

Can we do extra warm ups and dynamics stretches that aren't in FootyFirst?

Yes. FootyFirst is an injury prevention warm-up and exercise program. There is no problem if players do additional warm-up, stretching or strength and conditioning exercises. Players should do additional football-specific warm-up activities (such as kicking, handballing, marking, etc) after completing FootyFirst to prepare for the main training session.

Can I split the team into small groups doing different things?

Yes, if you have other people who can adequately supervise these small groups. Remember that you will need supervisors who can provide appropriate instructions and feedback to players on the correct way to do each exercise.

Should all players from all teams be doing FootyFirst?

Yes. FootyFirst is designed for all senior community Australian Football players to complete.

References

1. Gabbe BJ, Finch CF, Cameron PA. Priorities for reducing the burden of injuries in sport: The example of Australian Football. *Journal of Science and Medicine in Sport* 2007, 10(5):273-276.
2. Gabbe B, Finch C, Wajswelner H, Bennell K. Australian Football: Injury profile at the community level. *Journal of Science and Medicine in Sport* 2002, 5(2):149-160.
3. Braham R, Finch CF, McIntosh A, McCrory P. Community level Australian Football: a profile of injuries. *Journal of Science and Medicine in Sport* 2004, 7(1):96-105.
4. Hübscher M, Zech A, Pfeifer K, Hänsel F, Vogt L, Banzer W. Neuromuscular training for sports injury prevention: A systematic review. *Medicine & Science in Sports & Exercise* 2010, 42(3):413-421.










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