

## Warm-up

*Warming up is important for everyone prior to physical activity, regardless of age, ability or level of play.*

Warming up before playing Netball prepares the body, heart and mind for the upcoming activity. Netball players require a high degree of fundamental movement competency, skill and physical capability to cope with the movement patterns that are performed repeatedly within Netball.

Due to the nature of the game (explosive, powerful movements, repeated landings and the restrictive nature of the footwork rules), Netball has a high inherent injury risk.

The NetballSmart Dynamic Warm-up helps to prevent common Netball injuries. This type of warm-up, when used two or three times a week, has shown to lead to a decrease of lower limb injuries by a minimum of 40 per cent.

The NetballSmart Dynamic Warm-up is developed specifically for Netball and aims to enhance performance and prevent injuries in all age groups and levels of Netball as well as induce the physiological responses necessary in a warm-up.

The NetballSmart Dynamic Warm-up is tiered and includes strengthening, running warm-up, dynamic preparation/dynamic stretches, and Netball-specific movement preparation (jumping, landing and agility). This approach helps an athlete to develop the movement skill and strength necessary for Netball as well as prepare the body to train/play.

An effective coach will play a key role in enhancing performance and injury prevention by using the NetballSmart Dynamic Warm-up for every training and game.

**Warming up has many benefits such as:**

- increasing blood supply to the heart and working muscles
- making the muscles more pliable
- preparing the mind and body for physical activity
- practising movement patterns that occur frequently during the game
- increasing body temperature
- assisting with injury prevention
- improving fundamental movement skills.

Also, warming up may reduce post-activity muscular soreness and stiffness.

While younger players may be more flexible than those more senior, it is important to include good neuromuscular practices (stimulating both the neural system and the muscles to improve co-ordinated movement) early as these will establish familiarity with these routines and may increase the likelihood of their inclusion throughout future participation as players, coaches or umpires.

A **Mother Earth futureFERNs** NetballSmart Dynamic Warm-up routine for training should last for 15 minutes and include the following four parts **A, B, C, D**.

In some exercises there are two levels. Each athlete does only one level at a time. An athlete/team should work at the level they can achieve, however with a view to progressing as they improve. Hence the warm-up has a progressive nature.



## NetballSmart Dynamic Warm-up

**A. STRENGTHENING** - Netball is a strength-based sport and developing the necessary leg strength and control to jump and land well for performance and safely for injury prevention is important. Starting young with the basics allows the players to start developing the necessary strength and control for Netball. Balancing, jumping and landing take strength and control and are fundamentals of Netball.

**B. RUNNING WARM-UP** - activities which 'begin slowly' and at low intensity, and which gradually increase. In this phase, individuals will experience increased body temperatures and ranges of movement and, also, they will begin to sweat slightly. This phase should last around five minutes.

**C. DYNAMIC PREPARATION** - movements that prepare the body more specifically for those which will be performed during the following Netball game/skills session. Dynamic preparation also helps to move muscles through a full range of motion (ROM) and maintain the increase in body temperature which was achieved during the aerobic phase of the warm-up, and improves strength.

**D. NETBALL SPECIFIC PREPARATION** - a progression to higher-intensity activity, which involves quickening up activities such as fun sprints, fast footwork and Netball-specific exercises. These include activities such as jumping, landing, stopping, dodging, etc. This phase should last up to 5 minutes on Game Day and at practice sessions.

A **Mother Earth futureFERNs** NetballSmart Dynamic Warm-up for Game Day should last 15 minutes and includes only parts **B**, **C**, and **D** from the above.

Refer to [www.netballsmart.co.nz](http://www.netballsmart.co.nz) for the videos of all the NetballSmart Dynamic Warm-up exercises.

	NetballSmart Dynamic Warm-up	Time/Distance/Reps
Part A: Strengthening	<b>1. The Bench - static</b> i. Static Bench on forearms (or hands) and feet, lift pelvis off ground	3 x 10-20 seconds
	<b>2. Balance</b> i. Single leg stance - hold the ball ii. Single leg standing - throwing ball with partner	2 x 10-20 seconds each side 2 x 10-20 seconds each side
Part B: Running Warm-up  Place 3 cones out evenly between base line and centre court	<b>3. Running straight ahead.</b> Run to centre of court and back. Repeat. You can vary direction of running path as it happens in a netball game.	2 x 15 metres
	<b>4. Skipping.</b> Skip to centre court and back	2 x 15 metres
	<b>5. Butt kicks and jog.</b> Butt kicks to first cone, jog to second cone, butt kick to third cone and back	2 x 15 metres
	<b>6. Running - Circling Partner.</b> Run to first cone, side shuffle inwards towards and around partner and back out to cone. Run to next cone and repeat. Continue length of 15m and back.	2 x 15 metres
	<b>7. Running - quick forwards and backwards sprints.</b> Run to second cone and back to first cone. Repeat 2 cones forwards one back for length of 15m and back	2 x 15 metres
Part C: Dynamic Preparation	<b>8. Squats</b> i. Demi Squats ii. Squatting with a partner	10 10
	<b>9. Lunges</b> i. Demi Lunges ii. Lunges	5 each side 5 each side
	<b>10. Jumping and landing</b> i. Vertical jumps and land on 2 feet in good stable body position (SBP)	5
	<b>11. Jumping, turning and landing</b> i. Vertical jump and turn 90 degrees and land in stable body position (SBP) ii. Vertical jump and turn 180 degrees and land in stable body position (SBP)	5 each side 5 each side
Part D: Netball Specific Preparation	<b>12. Running and stopping.</b> Run to first cone (60-70% speed) and stop in SBP. Continue length of 15m and back.	2 x 15
	<b>13. Running, plant and cut.</b> Jog 3-4 steps ahead, plant on one foot and cut off foot. Repeat length of 15m and return.	2 x 15 metres



## A – Strengthening

### 1 The Bench-Static

- Support yourself on your forearms and feet. Place sweatshirt under elbows or do on hands like model 2.
- Your elbows are directly under your shoulders
- Draw your shoulder blades in towards your spine so that they lie flat against your back.
- Pull in your stomach and gluteal muscles and hold the position for 10–20 seconds.



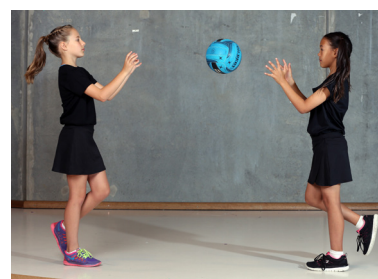
### 2 i. Balance Single-leg stance - hold the ball

- Stand on 1 leg and hold the ball in front in both hands or stand in pairs facing each other and both hold the ball.
- Bend knee and hip a little so upper body leans slightly forwards.
- When viewed from the front, hip, knee and foot of supporting leg are in a straight line.
- Hold your raised leg slightly behind your supporting leg.
- Hold 10–20 seconds. Do 2 each side.



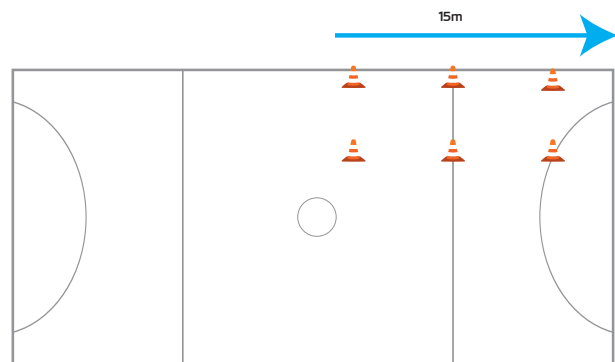
### 2 ii. Single-leg stance - throwing ball with partner

- Stand on 1 leg, 2 or 3 metres away from partner. Bend knee and hip a little so upper body leans slightly forwards.
- When viewed from the front, hip, knee and foot of supporting leg are in a straight line.
- Hold raised leg slightly behind supporting leg.
- Keep balance while throwing the ball to one another.
- Continue for 10–20 seconds
- Do 2 each side



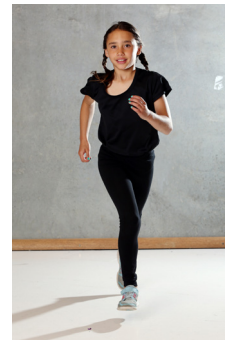
## B – Running Warm-up

This is where the Game warm up starts and the practice warm up continues. Place 2 cones and sticks out every 3 metres on court as shown. There are six running warm up components. Do each component.



### 3. Running - straight ahead

- Run to the middle cone and back, keeping upper body straight. Hips, knees and feet should be aligned. Vary direction as happens on the Netball court.
- The key points are:
  - Don't let knees buckle inwards.
  - Make a bit more effort on the way back.
- Repeat twice.



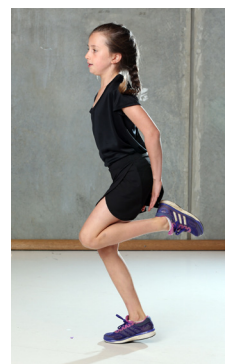
### 4. Skipping

- Skip to the centre court (last cone) and back, keeping upper body straight.
- The key points are:
  - Don't let knees buckle inwards.
  - Make a bit more effort on the way back.
- Repeat twice.



### 5. Butt kicks & jog

- Butt kick to the first cone, kicking your feet up to butt. Keep the body upright and knees in line with the hips.
- Jog to second cone.
- Butt kick to the third one.
- The key points are:
  - Keep body straight and upright.
  - Don't let knees buckle inwards.
- Repeat twice.



## B – Running Warm-up

### 6. Running – circling partner

- Run forwards as a pair to the 1st set of cones.
- Shuffle sideways at a 90-degree angle towards partner, shuffle an entire circle around one other, and then back to the 1st cone.
- Concentrate on bending hips and knees slightly and carry body weight on the balls of feet.
- Do not let knees buckle inwards.
- Jog to the next cone and repeat the exercise.
- When reach last cone, turn and repeat on the way back.



### 7. Running – quick forwards and backwards sprints

- As a pair, run quickly to the second cone then run backwards to the first cone, keeping hips and knees slightly bent.
- Repeat this, running 2 cones forwards and 1 cone in reverse. Do 2 x 15m.
- Make sure you keep upper body straight.
- Hips, knees and feet should be aligned.
- Do not let your knees buckle inwards.





## C – Dynamic Preparation

### 8. Squats

#### i. Demi-Squats

- Stand in pairs facing each other with feet shoulder-width apart.
- Do a small squat (hips back and with a bend in hips and knees).
- Keep knees in line with feet.
- Hold head upright, look at each other and keep back straight.
- Do 10 of these.



#### ii. Full squat with a partner

- Stand in pairs facing each other with feet shoulder-width apart.
- Hold onto each other's hands.
- Do a squat (push hips back and bend in hips and knees).
- Keep knees in line with feet.
- Bend until hips are at 90 degrees and thighs are parallel with the ground.
- Hold head upright, look at each other and keep backs straight.
- Do 10 of these.
- The sticks (as illustrated in the picture below) can assist the players understanding of knee in line with foot.



### 9. Lunges

#### i. Demi-Lunges

- Stand with feet shoulder-width apart.
- Do a small half-lunge forward, maintaining feet shoulder-width apart. Push back to starting position.
- Keep knees in line with feet.
- Hold body upright and with back straight.
- Do 5 demi-lunges on each leg.
- The sticks (as illustrated in the picture) can assist the players understanding of knee in line with foot.



## C – Dynamic Preparation

### ii. Lunges

- Stand with feet hip-width apart and hands on hips.
- Lunge forwards slowly at an even pace. During lunge, bend hips and knees until leading knee is flexed to 90 degrees.
- Hip, knee and foot should be in a straight line.
- Bent knee should not extend beyond the toes.
- Keep upper body straight and strong, and pelvis horizontal.
- Lunge towards the last cone and back.
- Do 5 lunges on each leg.
- The sticks (as illustrated in the picture) can assist the players understanding of knee in line with foot.



### 10. Jumping and landing

- Stand with feet hip-width apart and hands by sides.
- Slowly bend hips, knees and ankles until knees are flexed/bent.
- Lean upper body forwards slightly. Look up.
- Hold this position for 1 second, then jump and land. Land with hands in the catching position.
- While jumping, straighten whole body and extend arms above head.
- Land softly on the balls of feet, bending slowly in hips, knees and ankles. Ensure knees do not buckle inwards on jumping or landing.
- Do 5 of these.





## C – Dynamic Preparation

### 11. Jumping, turning and landing – vertical jump with a 90-degree turn and land in an SBP

- Feet hip-width apart and hands by sides.
- Slowly bend hips, knees and ankles until knees are flexed/bent.
- Lean upper body forwards slightly. Look up.
- Hold this position for 1 second, then jump, turn 90 degrees in the air and land. Land with hands in the catching position.
- While jumping, straighten whole body and extend arms above head.
- Land softly on the balls of feet, bending slowly in hips, knees and ankles. Ensure knees do not buckle inwards on jumping or landing.
- Bent knee should not extend beyond the toes on jumping or landing.
- Do 5 each side.



### ii. Vertical jump with a 180-degree turn and land in SBP

- Stand with feet hip-width apart and hands by sides.
- Slowly bend hips, knees and ankles until knees are flexed/bent.
- Lean upper body forwards slightly. Look up.
- Hold this position for 1 second, then jump, turn 180 degrees in the air and land. Land with hands in the catching position.
- While jumping, straighten whole body and extend arms above head.
- Land softly on the balls of feet, bending slowly in hips, knees and ankles. Ensure knees do not buckle inwards on jumping or landing.
- Bent knee should not extend beyond the toes on jumping or landing.
- Do 5 jumps on each side.



## D – Netball Specific Preparation

### 12. Running and stopping

- Run to 1st cone at 60-70 percent speed and perform a 1-2-foot/2-foot landing.
- Make sure upper body is straight.
- Hips, knees and feet should be aligned. Ensure that knees do not buckle in when stopping.
- Run to each cone and stop. At the last cone, turn and repeat on the way back to the start.
- Make sure each stop is properly controlled.



### 13. Running – plant and cut

- Jog 4 to 5 steps straight ahead.
- Plant on the left leg and cut to change direction to the right and accelerate again.
- Do not let knees buckle inwards as you plant and cut.
- Place the foot under your centre of gravity – not out to the side.
- Run 4 steps and decelerate and plant the right foot and accelerate to the left.
- Repeat the exercise until reaching the last cone; turn and repeat on the way back.
- Make sure the upper body is straight.
- On plant and cut, do not let body sway to side of planting leg.
- Hips, knees and feet should be aligned.

