

## Dynamic Warm ups for Speed, Agility and Quickness

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Over the years the warm up component of a training session has become increasingly more important with regards to injury prevention and performance enhancement. The warm up of today's athletes should involve vastly more than a couple of slow laps around the oval and a few minutes of static stretching with the aim of eliciting more than just an increase in core body and muscle temperature. An increase in core and muscle temperature is highly desirable, along with a number of other physiological and psychological responses (McArdle, Katch and Katch, 2000) but may occur irrespective of a warm up.

The initial aims of a dynamic warm up are to increase musculoskeletal stress, neural innervation and active ROM (Boyle, 2004) through the use of gradual progression and increasing intensity up to full speed, of movements specific to those performed in the sport or during the following session (Brown, Miller & Roberts, 2000). A warm up should consist of multi directional (Forwards, Backwards, and sideways) and multiple planar movements (Flexion, Extension, and Rotation) dependent on the nature of the session it precedes. A linear warm up is ideally performed prior to activities with minimal change of direction, such as forward and back sprinting and general metabolic conditioning (tempo runs). A lateral and or combination warm up can be used to enhance activities such as plyometrics, change of direction work and sport specific conditioning activities (Boyle, 2004).

Dynamic warm-ups that are functional and sport specific are more practical and provide the athlete/s with variety and fun within their training sessions through the use of equipment such as agility ladders, hurdles and partner resistance activities and can be altered to suit each sport and level of athlete. The warm ups shown in this article are examples for team or individual use, emphasizing the above components and aims to outline methods for further enhancing athletic ability, by incorporating a more advanced component that emphasises the essential qualities of speed, agility and quickness (Murphy et al 2003 and Spinks, 2004) within the athletes over time owing to a greater focus on dynamic flexibility, movement mechanics and force production.

The 3 examples included will each highlight *linear*, *lateral* and a *combination approaches* to warming up and will progress from low to high intensity (Part A) and with (Part B) further emphasizing movement speed and complexity for enhancing neural activation. All drills listed are to be performed forwards and backwards and or right and left over approximately 10-20 metres.

### Example 1. *Linear Warm up*

Part A	Part B SAQ Activities
a. Standing Stationary Arm Swings	m. Ladder / Hurdle Stride Runs
b. Walking on balls of feet	n. Straight Leg Hurdle Runs
c. Knee to chest walk	o. Staggered Hurdle Runs
d. Ankle flicks	p. Forward Ladder / Hurdle Hops
e. Butt Kicks	q. Forward and Backward Leg Swings using Wall or Partner

f. Alternate Skips	
g. Jogging	
h. Alternate skipping with high knees	
i. Jog with High knees	
J. Walking Lunges	
k. Fast Feet	
l. Sprints x 3-5 @ Max speed from 3 point or Standing Fall Start	

### Example 2. *Lateral Warm up*

Part A	Part B Performed @ High Intensity
a. Standing Stationary Arm Swings	m. Lateral Ladder / Hurdle Runs
b. Walking Carioca	n. Icky Shuffle
c. Walking Carioca with high knee lift	o. Lateral Hurdle Hops
d. Lateral Shuffle / Basketball defensive drill	p. One Two Cut
e. Lateral Running	q. Lateral Skater
f. Lateral Run with 360° turn	r. Forward and Backward Leg Swings using Wall or Partner
j. Lateral Squat	
k. Spiderman	
l. Sprints x 3-5 @ Max speed from 3 point or Standing Fall Start	

### Example 3. *Combined Warm up*

Part A	Part B Performed @ High Intensity
a. Seated Stationary Arm Swings	l. Ladder / Hurdle Stride Runs
b. Walking on balls of feet	m. Lateral Running Drill – using ladders or hurdles
c. Knee to chest walk	n. Staggered Hurdle Runs
d. Ankle flicks	o. Icky Shuffle
e. Walking Carioca	p. Ladder scissors drill
f. Walking Carioca with high knee lift	q. Plyo Jumps (3) to sprint x 3-5 @ Max speed
g. Forward and Backward Running	r. Forward and Backward and side to side Leg Swings using Wall or Partner.
h. Lateral Running	
i. Alternate Skips	
j. Inchworm Activity	
k. Spider man	

## References

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