

## **Dynamic Warm Up**

**By Pete Morrow  
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### **Q: What is a dynamic warm-up?**

A Dynamic Warm up can be easily defined as a series of movement drills performed in a progressive, deliberate sequence from low to moderate intensity. The initial drills might include jogging using different movements or running drills, and then gradually advancing to fast accelerations and changes of direction. This measured build-up in intensity enables the circulatory system to shunt blood to the working muscles for a steadily paced warm-up of the soft tissues.

### **Q: What does a dynamic warm-up do for the body?**

A dynamic warm-up does six very important things for the sports person/team preparing to play a game/match.

1. It increases your body temperature. At slightly elevated temperatures muscles are able to contract more efficiently and generate greater force.
2. It prepares the cardiovascular system and gets the heart and lungs ready to engage in vigorous activity. The cardiovascular system is important as it delivers oxygen to working muscles.
3. A dynamic warm up elongates muscles actively. This improves joint range of motion as well as the body's ability to handle the forces experienced during play.
4. It helps to engrain proper movement patterns. This will in turn lead to improved technical performance.
5. The dynamic warm-up wakes up the nervous system and gets the brain talking with the muscles, allowing your muscles to work more efficiently.
6. It facilitates the athlete to focus their mind and to allow them to move into their competitive mind-set.

### **Q: What about Static Stretching?**

Static stretching is where you put a muscle under light tension and then hold that position for 15-60 seconds.

Recent research has shown that static stretching may not be appropriate when preparing to play sport because it can reduce the amount of force and power the stretched muscles can generate. These effects can last for more than one hour after stretching. Obviously, power and explosiveness are important aspects of today's game. Therefore it is

recommended that a dynamic warm-up be performed before every practice or competition instead of static stretching.

### **Q: Is static stretching bad for you?**

Static stretching is still very important for athletes since it helps to improve flexibility and joint range of motion – the issue is more about when it should be performed. Regular static stretching should still be a part of every athlete's training program. However, it should be performed after practice or competition, during a cool-down period, or as part of a daily body maintenance routine.

### **Q: What guidelines should I follow when performing a dynamic warm-up?**

There are some general guidelines that should be followed when performing a dynamic warm-up. Some things to think about include:

- Each dynamic warm-up routine should follow 3-5 minutes of a light general warm-up activity, something like jogging, riding a stationary bike, or jumping rope.
- Follow the dynamic warm-up with some light skill work. Do not go right from the dynamic warm-up to all out play.
- You do not need to rest for long periods of time between exercises; 15 seconds of rest should be enough to recover for the next exercise.
- Dynamic warm-up exercises do not need to be performed on the field or court you play on. You can use a gym, a field, or anywhere you have enough space to perform the exercises safely.

### **Ideas for a Sound Dynamic Warm Up**

1. 4 x 30m easy jog (turnaround every 30m).
2. Jog backwards 30m and jog 30m.
3. Jog 30m changing direction.
4. Jog 30m slowly bending to touch the ground.
5. Jog 30m doing foot under butt. Jog 30m.
6. Jog 30m doing butt kicks. Jog 30m.
7. Easy jog for 30m bending over to touch your toes (every 10m) as you go.
8. Rhythm skipping 30m (no rope needed) with arms swinging.
9. High skipping 30m (no rope needed) with arms swinging.
10. Walk several times 30m doing various flexibility movements: straight leg marching with rotation, arabesque with quad stretch, lateral crossover lunge, long lunge with rotation, walking with arm circles, and reverse down face dog walk out. Note: Doing flexibility work is always a good option when athletes are seen to be tiring.
11. Hopping 30m alternative legs every 5 hops.
12. Run and jump for height for 30m.

13. 2x4 frog jumps.
14. 1800 reverse for 30m.
15. Accelerate 30m zigzagging across the court/field.
16. Using a low side stepping pattern, zigzag across the court/field 30m.
17. Accelerate out 10 m, then jog backwards back to the start line x 5.
18. Accelerate out 5m (as you would when leading) then simulate catching the ball without stepping for 30m x4.

The Dynamic Warm Up in training can be used to help improve fitness, by having minimal rest between exercises and lasting up to 30 min, in competition the warm up should last about 10-20 min and have slightly longer rest periods scattered through the warm up routine.

## **Improving Game Fitness for Netball**

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For the duration of a netball match the dominant players have a superior ability to repeatedly accelerate to each contest faster than their opponent. Netballers who have supreme match fitness are faster over 5-10m, can recover from multiple accelerations at a higher jogging intensity as they move towards the next possible contest and can sustain the intensity of the acceleration throughout the game better than their opponent. This type of training should make up the core of the netballers plan to improve game fitness and it is referred to as Sprint/Recovery Training.

Sprint/Recovery Training has the capacity to develop multiple fitness components within the one activity. Components like acceleration, agility, endurance, speed and power. Traditionally, improved game fitness has been centered around distance running as endurance has been identified as a critical factor that influences performance over the duration of the game. This still remains true. However, the time spent improving endurance through jogging and running long distance is the time you spend practicing running slowly at a constant pace and in a straight line. This part of the training negates the improvements made in endurance.

For an athlete to develop their game fitness, they need to practice acceleration sprints and agility drills of 5 to 15m. Being explosive over 5-10m determines whether the player gets front position to receive the pass or reach the ball. Training drills need to incorporate agility drills that enhance the player's ability to swiftly change direction and accelerate. These drills need to incorporate work to rest ratios of about 1:3 and the rest periods should be a combination of walking, slow jogging and moderate jogging, depending on the position played and the recovery intensity required. This prepares the athlete to recover whilst running next to the play or moving into position.

It is important to consider the types of starting positions and how these may relate to netball. In netball you need to be able to accelerate from a jogging start as you will have moments where you will run next to the play until you see your opportunity to get directly involved. Also you need to start from moving backwards to sprinting forwards as well as from a stationary position where your feet maybe wide as you try to out position your opponent.

Incorporating a small block of aerobic running at the start of a training phase still has a role to play to develop a base level of fitness especially if players have been inactivity during the off-season.

Sprint/Recovery Training requires the athlete to rehearse many repetitions of accelerating then recovery, over and over again with the athlete focused on maintaining their dedication to being explosive even as the effects of fatigue begin to increase. As a result

of Sprint/Recovery Training the athlete will develop their cardiovascular endurance, acceleration speed, agility, power and their ability to repeatedly sprint time and time again. When these characteristics effectively function together the athlete is considered to be game fit.

### **ASI Athlete Training Centre**

Athletes that are serious about their sport now have a gym to call their own, with the opening of the ASI Athlete Training Centre.

Located at the Carey Sports Complex in Bulleen, the ASI Athlete Training Centre is designed to provide more developing athletes the opportunity to train in a high performance environment, bridging the gap towards National and State Institutes of Sport.

### **Pathway Program**

The Pathway Program lays the performance foundation for an athlete to reach their full potential. Move faster. Jump higher. React quicker. The Pathway Program offers outstanding physical preparation for competition using a high performance training program. It is designed to accommodate all ages and sports.

### **Club High Performance Program**

**...bridging the gap towards the National and State Institutes of Sport.**

ASI is working together with sporting clubs to create a Club High Performance Program. The High Performance Program is a squad training program for your clubs most promising netballers to be selected for based on their performance level, training attitude, and willingness to train hard. Those selected will train together with an ASI Performance Coach to improve their acceleration, agility, movement and repeatability of high intensity efforts, as well as learn about warming up, cooling down, nutrition and hydration. Athletes will be in an environment where work ethic and training attitude will be a dominant focus and a pre-requisite for future selection. These netballers will be groomed to become the clubs future leaders who will set the standard and enforce the culture of a hard work ethic demonstrated by supreme levels of physical and mental fitness. The High Performance Program can be set up to cater for your club's different age group categories.