

Warm Up & Cool Down

Why should I warm up and cool down for sport or activity?

There are numerous health benefits associated with performing an effective warm up and cool down before and after sport or activity. These include:

- Reduced likelihood of injury
- Improved athletic performance
- Greater mental concentration
- Improved fitness
- Faster recovery from activity
- Improved flexibility

Warm Up

How long should I warm up for?

One of the best ways to prevent injury is with an effective warm up prior to sport or activity. A proper warm up should be at least 15-20 minutes in duration and should progress through a variety of stages and warm up activities.

What is the purpose of a warm up?

The purpose of an effective warm up is to increase your heart rate and body temperature, and to facilitate blood flow to the muscles to be used during the activity. This increase in blood flow, heart rate and body temperature during the warm up improves the elasticity of both muscles and joints, alerts neural pathways and stimulates muscles in preparation for performance. An effective warm up will also help to evenly distribute lubricating fluid throughout the joints to be used therefore reducing friction during movement.

How to warm up

As a general guideline, an effective warm up should produce mild sweating without fatigue and should progress through four primary phases:

Warm up – Phase 1

The first phase of a warm up should involve a low intensity cardiovascular exercise such as light jogging or walking to increase the heart rate and blood flow to muscles. This phase of the warm up should last for 5-10mins.

Warm up – Phase 2

The second phase of the warm up should involve dynamic range of movement exercises to loosen up the joints and muscles to be used. This phase of the warm up should focus on those specific body parts to be used for that particular sport. These warm up stretches should be dynamic rather than static as static stretches will decrease heart rate and cause a cooling effect thereby opposing the goals of a warm up. Some examples of dynamic warm up stretches include: lunges, squats, lower back rotations, trunk rotations, leg kicks, arm rotations etc.

Warm up – Phase 3

The third phase of a warm up should entail warm up activities involving agility, acceleration, deceleration and speed drills, preparing your body for faster movements

that will be required for your particular sport. This should involve a gradual progression starting at low intensity and building up to greater intensity. This phase of the warm up may involve, for example, repeated strides, initially in straight lines and at low intensities and then progressing to change of direction and greater intensities.

Warm up – Phase 4

The fourth and final phase of a warm up is the sport specific phase. This is where you perform the skills involved in your particular sport, initially at low intensity and then building up to greater intensity. For example, footballers may perform warm up activities such as running, jumping drills and kicking for goal, basketballers may perform dribbling, passing, shooting and rebounding etc. By the end of this phase of the warm up you should be performing your particular skill at 100%, thereby ensuring you body is ready to perform the required skills in a match situation at 100%.

When should I warm up?

The timing of the warm up also needs to be considered. This is essential as the beneficial effects of a warm up usually last approximately 30 minutes. It is therefore important not to warm up too early or your body will have started to cool down. It is also important to avoid warming up too vigorously or for excessive periods as this may induce fatigue and decrease athletic performance.

Cool Down

Benefits of a cool down

An appropriate cool down following sport or activity is essential for the body's recovery process. Not only will an effective cool down assist with decreasing muscle soreness in the following days, but it will also assist in reducing muscle shortening and injury likelihood. Furthermore, an effective cool down will improve performance for the next session, especially if the sport or activity is required shortly after.

How long should I cool down for?

An effective cool down should take between 10-20 minutes and involve a very light activity immediately following the sport or activity and cool down stretches.

How should I cool down?

A cool down should comprise light activities such as walking or light jogging for approximately 5-10 minutes followed by static cool down stretches of the major muscles that were used for the particular sport or activity.

Cool down stretches

Cool down stretches should be performed slowly and gently, taking the muscle towards its end of available range and holding at a mild to moderate stretch for periods of 30-60 seconds. Static cool down stretches following sport or activity help to improve flexibility and hasten the recovery process.

Warm Up & Cool Down Summary

- An effective warm up & cool down is essential to reduce injury likelihood, hasten recovery from activity, improve sporting performance and flexibility.
- An effective warm up should take 15 – 20 minutes and should comprise cardiovascular activity, dynamic stretches, drills involving: agility, speed, acceleration and deceleration and finally sports specific skills.

- A warm up should be concluded no earlier than 30 minutes prior to sports or activity participation and should not cause fatigue.
- An effective cool down should take 10 – 20 minutes and should comprise very light activity (such as walking) directly after sports participation and cool down stretches.

If you need expert advice about injury prevention please call me on +442866328200 or email info@lindaburkie.co.uk