

Coaching for Performance 8

Key term

Delayed-onset muscle soreness (DOMS) – the pain or discomfort often felt 24–72 hours after exercising. It subsides generally within 2–3 days.

Cool down

The purpose of a cool down is to return the body to its pre-exercise state.

Functions

The three main objectives of a cool down are to:

- ▶ return the heart rate to normal
- ▶ remove any waste products that may have built up during exercise
- ▶ return the muscles to their original state (or length if stretched).

A cool down will keep the metabolic rate high and capillaries dilated to enable oxygen to flush through the muscle tissue, which helps remove lactic acid waste created by the exercise. This should stop the blood from staying in the veins, which can cause dizziness if the exercise is stopped too quickly. A cool down can also reduce the effect of **delayed-onset muscle soreness (DOMS)**, which often follows strenuous exercise that the body is not used to. It was once thought to be caused by lactic acid build-up, but a more recent theory is that it is caused by tiny tears in the muscle fibres caused by eccentric contraction such as downhill running, or unaccustomed training levels.

The final part of the cool down should include stretching that is designed to facilitate and improve flexibility, as the muscles will be very warm at this stage.

Theory into practice

Clients may not feel like doing a cool down after a strenuous workout, but they must understand that because of the possible benefits, it is worth doing. By getting into the habit from an early age, clients will be more disciplined about performing a cool down. Consider why a cool down is important and what the consequences are of not performing a full cool down

Components

Lowering of the pulse

You should select cardiovascular exercises that involve all the major muscle groups. Start at a high intensity and gradually decrease it so that a drop in heart rate can be achieved. The cardiovascular exercise should last for approximately five minutes. It is common to use an exercise bike so the client can sit down after strenuous exercise.

Stretches

Stretching as part of a cool down will allow the muscles to return to their normal working length. It will also aid the removal of waste products that may have built up in the muscles. Stretching can be either maintenance or developmental:

- ▶ Maintenance stretching allows the muscles to return to their normal length.
- ▶ Developmental stretching is used on muscles that may have become tight and shortened during exercise.

Developmental stretches

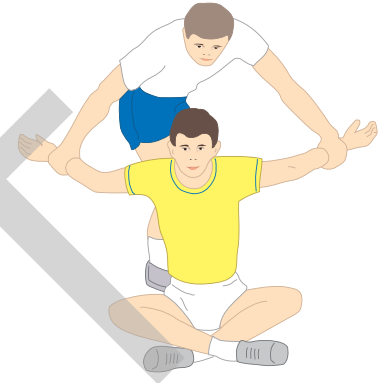
These involve stretching and holding the working muscle for about ten seconds until it relaxes. Following this, the muscle should be stretched again but at an increased level, and again held for ten seconds. This process should be repeated three times.

Proprioceptive neuromuscular facilitation (PNF)

This is a combination of passive stretching and isometrics, in which a muscle is first stretched passively and then contracted. The technique targets nerve receptors in the muscles to extend muscle length.

PNF stretching was developed as a form of rehabilitation. It can also be used to target specific muscle groups. As well as increasing flexibility and range of movement, it can also improve muscular strength. PNF stretching includes the following stages:

- 1 First the relaxed muscle is stretched by an external force, such as an exercise partner, or by the person's own body weight against the floor, wall or similarly resistant object. Where a partner is available, the athlete and a partner assume the position for the stretch, then the partner extends the body limb until the muscle is stretched and tension is felt.
- 2 The athlete then contracts the stretched muscle for 5–6 seconds, and the partner must inhibit all movement. The force of the contraction should be appropriate to the condition of the muscle. For example, if the muscle has been injured, do not apply a maximum contraction.
- 3 The muscle group is then relaxed, then immediately and cautiously pushed past its normal range of movement for about 30 seconds.
- 4 Allow 30 seconds' recovery before repeating the procedure two to four times.



► **Figure 8.5** A PNF cool down exercise. How can PNF be used to improve flexibility and why is this importance in sport and exercise?

Discussion

Recovery time must be taken into consideration when preparing and risk assessing training sessions. In small groups, discuss the reasons why a lack of recovery time could be dangerous and why there is a risk that not enough time will have been allowed for cool down in training sessions. How could this be avoided?



PAUSE POINT

Do you understand how cool downs can help improve an athlete's performance and avoid injury?

Hint

What happens when you don't rest or recover between activities?

Extend

Conduct a risk assessment of an athlete's training programme – how are they putting themselves at risk?

Assessment activity 8.3

C.P3

C.M3

C.D3

You are the head coach of an under 18s cricket team. It is three weeks until the start of the new season and you meet the team twice weekly to train. Within the team there are a number of new players. Although the team's batting is looking strong, their fielding and their reactions in the field are poor. Additionally, some players' stamina is questionable after a long season off.

- 1 Produce a detailed plan for the first coaching session of six.
- 2 Design a series plan for the remainder of the sessions before the start of the season. Ensure that your plan follows safe working coaching practices.
- 3 For the benefit of your two assistant coaches, prepare a presentation that clearly explains the thoughts and considerations linked to your plans and how they link together to form a cohesive series of sessions.

Plan

- What is the task? What am I being asked to do?
- How confident do I feel in my own abilities to complete this task? Are there any areas I think I may struggle with?

Do

- I know what it is I'm doing and what I want to achieve.
- I can identify where I've gone wrong and adjust my thinking/approach to get myself back on course.

Review

- I can explain what the task was and how I approached it.
- I can explain how I would approach the hard elements differently next time (i.e. what I would do differently).

THINK ▶ FUTURE



Nick Dodd
Sports coach

Sports coaching is a great job. I get to work with lots of really keen young people, which is great. Helping them to develop is really fulfilling. It isn't all easy though. One of the biggest problems that I face is when I am working with different age groups. I currently coach football teams for under-10s, under-12s and under-14s, so there are lots of different things that I need to take into account when I am planning and running sessions.

At times it can get a little confusing, especially when I'm working with some of the 10-year-olds who are more mature or more advanced than some of the 12-year-olds! I often think that working with people based on their age group is not the best way to work, especially between the ages of 10 and 14. This is where there are some of the biggest differences in growth and maturity and I'm always trying to find better ways of working with my players to meet their individual needs rather than the needs of their age group.

Focusing your skills

Managing people

Coaching is not just about teaching people how to play a sport. You need to be a leader and manager as well as an expert in your sport.

- Developing your teamworking and leadership skills will be important. Try and identify any opportunities to do this. For example, if you take part in a group discussion in class, volunteer to lead the discussion.
- Coaching is a professional environment. Make sure you are familiar with the attitudes and responsibilities you will need to follow in a professional environment.
- Part of leading sessions is understanding that everyone is different – both in personality and how people are best motivated. Talk to friends and family: how do they motivate themselves? What do they look for in a leader? The different answers you receive will show you the range of options for leadership styles that coaches have.

Organising your time

Understanding how to plan and organise your time is a crucial skill. The more organised you are, the more authoritative and professional you will become – and the more respected you will be as a coach.

- Try to plan your time – get used to organising yourself and work out the best ways you can structure your time. It may help to organise your tasks into achievable chunks.
- When working in a group in class, review and organise the tasks you have been given. Work out a plan that will allow you to achieve everything you need to do within the time you have been given.