

2

WARM-UP, COOL-DOWN AND STRETCH

thinksafe

WARM-UP, COOL-DOWN AND STRETCH

Warming up before playing sport prepares the mind, heart, muscles and joints for the upcoming event. It improves performance, helps players get mentally prepared and is a great step towards injury prevention. Cooling down is equally important. It helps the body to recover and gradually return to its normal temperature. This is also a good time to work on flexibility.

Get your blood pumping



Warm-up

Warming up prepares the body for physical activity – it prevents a rapid increase in blood pressure, improves blood flow to the heart, increases muscle temperature and makes muscles more pliable. By warming up, players will improve their performance and reduce the risk of injury.

Coaches should focus on the following components of a warm-up.

1. AEROBIC EXERCISE

- Do some easy exercise (such as jogging, cycling and skipping) continuously for 5-10 minutes to raise the body temperature so the body is sweating lightly.

2. STRETCHING

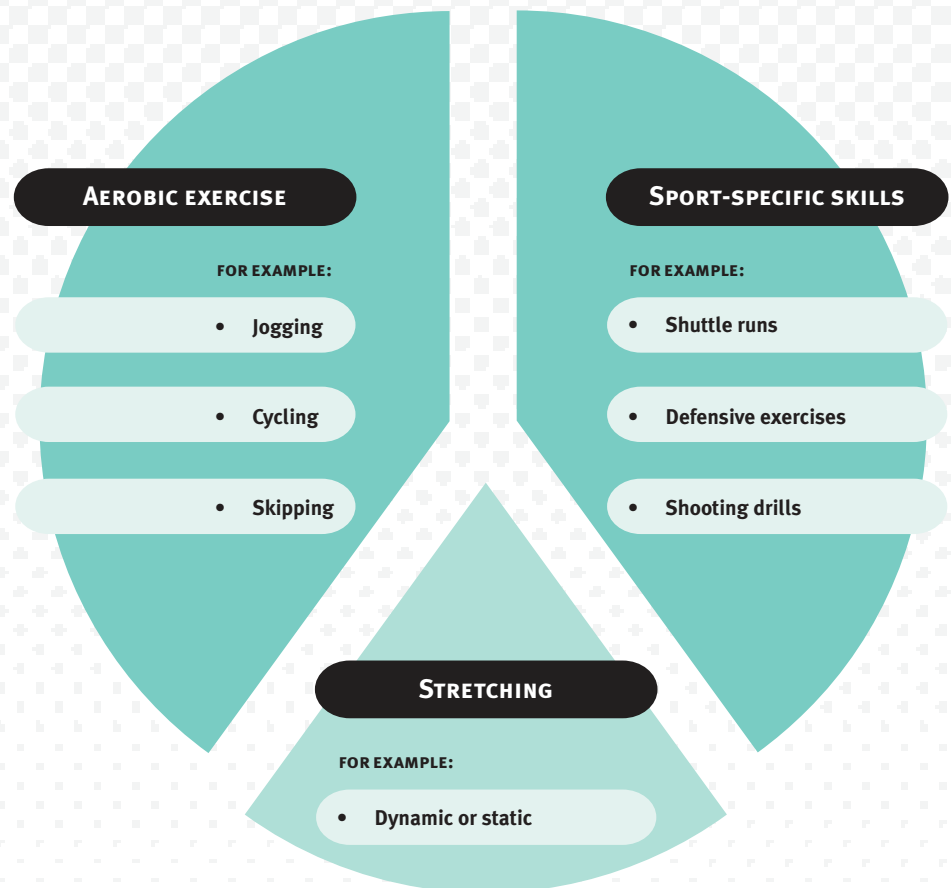
- Stretch all the major muscle groups used when playing sport.
- Choose “dynamic” or “static” methods.
- Dynamic stretching involves stretching movements performed at gradually increased speed. See www.acc.co.nz/sportsmart for examples.

- Static stretching involves placing a muscle in its most lengthened position and holding for at least 30 seconds.

3. SPORT-SPECIFIC EXERCISES

- Do the sorts of exercises frequently used in your sport, such as short sprints, shuttle runs, changing direction quickly, shooting drills and defensive exercises with a partner.

THE RELATIVE IMPORTANCE OF EACH COMPONENT OF THE WARM-UP



Cool-down and stretch

Cooling down and stretching after playing sport may reduce the risk of injuries happening. It also helps to promote flexibility. This low-intensity exercise should last for 5-15 minutes and include activity such as slow jogging and stretching.

Coaches should focus on the following components of a cool-down.

1. AEROBIC EXERCISE

- Slow jogging around the field or court is one of the best ways to cool down.
- Alternatives to jogging include low-intensity cycling and brisk walking.

2. STRETCHING

- Static stretch for 10 minutes after the light jogging.
- Follow the “keys to effective static stretching” below.
- For greater flexibility, hold the stretches for 60 seconds during the cool-down.

3. RECOVERY

- After any exercise, make sure players rehydrate.
- Treat any sprains, strains or bruises with the R.I.C.E.D. procedure.

THE KEYS TO EFFECTIVE STATIC STRETCHING

1

Do some light aerobic exercise before starting stretching.

2

Breathe normally.

3

Apply each stretch slowly – take it to where tension can be felt, but not pain.

4

Hold each stretch for at least 30 seconds.

5

Don't bounce up and down while stretching.

6

Stretch all major muscles, especially those that will have a large demand placed on them.

STRETCHING EXERCISES

-----> Movement to get stretch

=====> Area being stretched

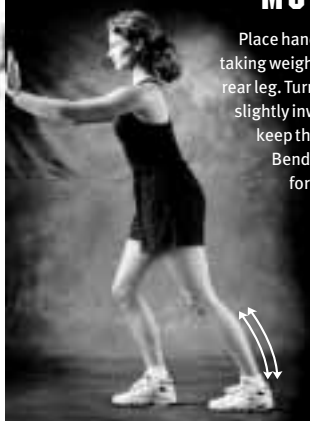
LONG CALF MUSCLE

Place hands on wall, with one leg to rear. Keep rear leg locked straight and foot flat. Turn rear foot slightly inwards. Bend front leg, taking stretch through rear calf.



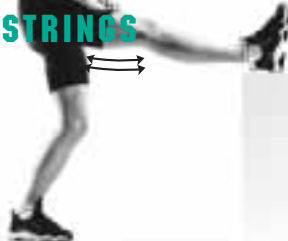
SHORT CALF MUSCLE

Place hands on wall taking weight through rear leg. Turn rear foot slightly inwards and keep the heel flat. Bend rear knee forward over rear foot.



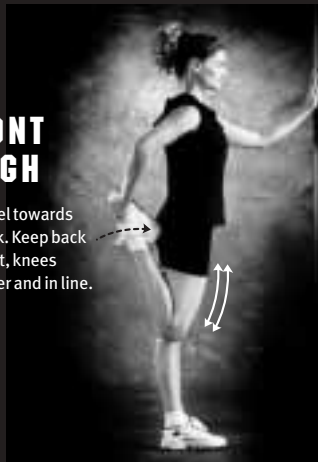
HAMSTRINGS

Place foot on a raised surface. Stand with supporting foot turned slightly inwards. Bend supporting knee. Keep back straight.



FRONT THIGH

Pull heel towards buttock. Keep back straight, knees together and in line.



TRUNK SIDE FLEXORS

Stand with feet comfortably apart. Fold arms above head. Bend to the side slowly. Stretch up with upper elbow.



PECTORALS

Stand side-on to a wall or pole with closest leg forward. Place forearm on wall with shoulder slightly above 90°. Turn upper body away from wall or pole.



TRICEPS STRETCH

Place hand between shoulder blades. Place opposite hand on elbow. Pull elbow towards midline with help from opposite hand.



Kneel on ground with front knee at 90°. With the back straight, tilt the pelvis back by tucking the abdomen up and in and squeezing buttocks. Keep head up.

HIP FLEXOR



SHOULDER CHEST

Stand with head up, chin in, hands clasped behind back. Pull shoulders down and back. Press shoulder blades together and down. Pull the stomach in to prevent arching of the lower back.



LOWER BACK



Lie with hands behind head, arms flat. Bend hips and knees to 90°, feet together. Roll knees over to ground. Upper knee should be directly above lower knee.

GROIN



Sit on floor with back straight. Grasp the ankles and draw them towards groin. Use the elbows to apply a gradual downward and outward pressure on the knees.

BUTTOCK



Gluteals – Lie on back with both hands around one knee. Pull knee towards opposite shoulder. Keep head, shoulder and opposite leg relaxed.

Piriformis – Lie on back and hold knee to chest. Pull knee and ankle towards opposite shoulder.

For more information on warm-up, cool-down and stretch, contact: the relevant sports organisation or SPARC (Sport and Recreation New Zealand): www.sparc.org.nz

THE 10-POINT ACTION PLAN FOR SPORTS INJURY PREVENTION

1

SCREENING

2

WARM-UP, COOL-DOWN AND STRETCH

3

PHYSICAL CONDITIONING

4

TECHNIQUE

5

FAIR PLAY

6

PROTECTIVE EQUIPMENT

7

HYDRATION AND NUTRITION

8

INJURY REPORTING

9

ENVIRONMENT

10

INJURY MANAGEMENT