



# Running strength and conditioning



Using the gym is not just about lifting heavy weights and growing big muscles. Gym exercises are very important for developing the basic foundations you need to perform well in your sports; from joint mobility and stability, to muscular strength, endurance and reducing the risks of injury.

Gym exercises tend to work specific muscle groups which allows us to chose which exercises will work best to improve our sport performance. Running involves the calves, hamstrings and glutes to drive us forwards; and the quadriceps and abdominal muscles to drive our knee through to give us a long, strong stride.

Building strength in these areas will make your legs more powerful, and your times quicker!

## Warm up (3 basic components)

- 1- **Pulse raiser-** for example high knees, a 5 minute jog or 5 minutes on the skipping rope. These will get your heart pumping enough oxygen to your muscles to allow them to work properly in your session.
- 2- **Dynamic stretches-** stretches on the move such as walking lunges, 'shoo the chickens' and 'open the gate'! Dynamic stretches will warm up your muscles and joints, making them more flexible and reducing the risks of injury.
- 3- **Sport specific exercises-** for example, if you were warming up for tennis you would do an easy rally with your friend to prepare your body for the movements needed in your training session. Before the gym this would be some simple, bodyweight squats or split squats.

## Cool down-

- 1- Go for a walk to allow your heart rate and breathing rate to go down slowly after you finish- as nice as it may feel, you mustn't flop on the sofa after your session! You need to keep moving to keep giving oxygen to your muscles to help them recover and prevent cramping
- 2- Lightly stretch post workout- to keep your muscles moving to prevent cramping; to stop you feeling as sore the next day, and to maintain your flexibility! Be careful not to overstretch after you workout as the muscles will have just been stressed and are much easier to damage.

## Reducing injury

-**Don't overexercise.** As in most sports, strength and conditioning work puts extra strain on the body, is important to know your limits and not to overwork yourself, especially if you are just starting to exercise again post lockdown!

-**Take enough rest-** give yourself time to recover between exercises, but also between sessions to allow your body to adapt and grow. Most of your muscle growth will occur whilst you are resting and recovering.

-**Progressive overload-** Make sure each session you gradually increase the intensity. You can do this by adding weight, reducing rest between sets or increasing the number of reps. As you get stronger you will need to make your workouts a little bit harder to keep pushing yourself!

-**Warm up and Cool down correctly.**

**Important words to know:**

**Repetitions/ reps**- completing the movement once. For example 5 squats, is 5 reps of squats

**Sets**- a set number of reps which you will repeat. For example I will do 5 squats and then have 30 seconds rest. This would be one set of squats.

An example of these used in a workout would be 8 reps of bicep curls 3 times. This would mean you do 8 bicep curls, have a rest, then do another 8, have a rest, then do another 8! 8 reps, 3 sets.

## Before you start make sure you are...

- Are hydrated
- Have eaten enough food (you need to eat enough to give you enough energy to feel strong in your session, but not too much that you feel sick!)
- Are warmed up, and free from any injuries which might get worse if you work them again
- Listen to your body! You will get more out of your workout if you are feeling healthy and full of energy.

These are only examples, use them as a guide and make the session suit **you**. If you find anything too hard or too easy, you can increase or decrease the number of reps

## Session 1- tadpoles to junior level

5 reps (each leg)	Hamstring bridge (first variation)	3 sets
5 reps (each leg)	Bulgarian split squat	3 sets
12 reps	Squat	3 sets
20 seconds (each leg)	Hopping backwards and forwards (jump 6 inches forwards and back)	3 sets
10 hops	Pogo hops	3 sets

## Session 2- junior level and above

And anyone else feeling brave enough!

10 reps (each leg)	Hamstring bridge (first variation)	3 sets
6 reps (each leg)	Front foot elevated goblet split squat	3 sets
8 reps	Squat jumps	3 sets
12 ankle pumps	Hamstring bridge (with ankle pump)	3 sets
30 seconds (each leg)	Hopping backwards and forwards (jump 6 inches forwards and back)	3 sets
10 hops	Pogo hops	6 sets
30 second hold	Isometric hamstring bridge (3 <sup>rd</sup> variation)	3 sets

Aim for 30- 60 seconds of rest between sets. Between exercises you can take as much rest as you want, make sure you rehydrate and get your breath back before you start the next one!