

Bigg Change

Change your focus. Change your life.

Strength & Conditioning for Runners

Foundation Workout

Strength & Conditioning (S&C) for Runners is as important as proper and effective warm up and cool downs. An adequately conditioned runner will perform better and have a lower risk of injury than a non-conditioned runner.

The goal for the runner is to create strength, mobility and flexibility, and not necessarily to bulk or add muscle mass. I say this here because there is often a misconception that if you perform resistance training you will get big and that seems counter-intuitive to running performance. The fact is that the effort required to gain muscle mass (i.e. bodybuilding) is totally different to the efforts required of a Runner when performing S&C.

This handout is split into two workouts – one that is equipment free and another that requires some very cheap, and very easy to store equipment. Both contain exercises that I know will create a firm foundation of good muscular conditioning, one that will significantly improve your running – both performance and enjoyment.

The purpose of a foundation workout, such as those listed in this handout, are to build muscular endurance prior to more specialised strength training is undertaken, such as training specific to power and speed.

With regards to the equipment needed I recommend an exercise mat and a set of 2-3 resistance bands, although one light resistance band is fine to get started with.

Performing the workouts

- 1** Perform some form of warm up prior to the workout. As these are running specific exercises your usual running warm up would be perfect.
- 2** Start by performing 2 sets of 12 to 15 repetitions of each exercise listed. Once this feels comfortable, add in a 3rd set.
- 3** Perform your chosen workout at least once, ideally twice, per week. It is ok to do this on the same day as a run, but make sure the run is easy.
- 4** You will find that eventually, you outgrow these workouts. This is a good thing, but you will need to find new exercises to do in order to maintain your progression.

Workout #1 – No Equipment

Exercise	Sets	Repetitions
Single Leg Balance	1	Up to 1 minute each leg
Single Leg Squat	2 – 3	12 – 15 each leg
Single Leg Deadlift	2 – 3	12 – 15 each leg
Wall Sit	2 – 5	Up to 1 minute each
Push Ups	2 – 3	10 – 15
Superheroes	2 – 3	10 – 12
Bird Dogs	2 – 3	12 – 15 each leg
Plank	2 – 3	Up to 1 minute each
Side Plank	2 – 3	Up to 30 seconds each side

Workout #2 – Resistance Band

Exercise	Sets	Repetitions
Single Leg Balance	1	Up to 1 minute each leg
Single Leg Squat	2 – 3	12 – 15 each leg
Single Leg Deadlift	2 – 3	12 – 15 each leg
Squat w/ Overhead Press	2 – 3	12 – 15
Banded Deadlift	2 – 3	12 - 15
Push Ups	2 – 3	12 – 15
Bent Over Rows	2 – 3	12 – 15
Shoulder Front Raise	2 – 3	12 - 15
Superheroes	2 – 3	12 – 12
Bird Dogs	2 – 3	12 – 15 each leg
Plank	2 – 3	Up to 1 minute each
Side Plank	2 – 3	Up to 30 seconds each side

Exercise Explanation - No Equipment Exercises

<p>Single Leg Balances</p>	<p>How : Aim to balance on each leg for 1 minute but start off at 30 seconds each leg and work up to 1 minute. When you can do it without losing your balance, add in periods of closed eyes.</p>
<p><i>Primary : Balance Secondary : Legs & Core</i></p>	<p>Why : Balance is a key component of everyday life but particularly when running where you are generally only ever touching the ground briefly with one foot. Practicing single leg balances strengthens muscles and neuromuscular connections all the way from your toes to your core.</p>
<p>Single Leg Squat</p>	<p>How : Stand with feet hip width apart. Lift your left foot from the ground, extending it out in front of you slightly. Bend your right knee and push your hips back to lower your body towards the floor, as if you were sitting on a chair. Go as low as you can without losing balance or until your right thigh is parallel to the floor. Return to the starting position, pushing through your right heel, for one rep.</p>
<p><i>Primary : Glutes, Hip Flexors, Quads Secondary: Core, Calves and Hamstrings</i></p>	<p>Why : Unilateral squats promote muscular balance as it isn't possible for your stronger side to dominate and take over.</p>
<p>Single Leg Deadlift</p>	<p>How : Stand with feet hip width apart and your core engaged. Shift weight to your right foot, slightly lift your left foot off the floor. Keeping your chest up, your back flat and your eyes straight ahead, tilt your upper body forward, tracking your hands down the front of your legs. Extend your left leg out behind you as your lower, until you feel the contraction in your right hamstring, pause briefly before returning to the starting position, squeezing your hips and glutes.</p>
<p><i>Primary : Hamstrings Secondary : Core, Calves, Glutes and Hip Flexors</i></p>	<p>Why : In addition to the unilateral benefits noted above, the movement required for this exercise additionally bring balance and proprioception into play.</p>
<p>Wall Sit</p>	<p>How : Stand against a wall with your head and back touching the wall, feet shoulder width apart and away from the wall. Lower into a squat position, maintaining contact with the wall until your thighs are parallel to the floor or ground. This is your holding position. Hold for the desired duration before returning to the standing position.</p>
<p><i>Primary : Glutes, Hip Flexors, Quads Secondary : Core, Calves and Hamstrings</i></p>	<p>Why : The wall sit builds muscular endurance as you increase the time spent in the position. Good muscular endurance will help to delay fatigue and allow you to run for longer periods of time.</p>

<p>Push Ups</p>	<p>How : Get into a high plank position. Legs together and extended with your toes and balls of feet on the ground. Hands directly below shoulders with arms fully extended. There should be a nice line from ankles to head (i.e. your bum shouldn't be up). Engage your core to maintain the body position whilst bending your elbows to lower you chest to the ground. Stop just before you touch the ground and push back up to your starting position for one rep.</p> <p>Modification : perform as above but with hands higher than feet (on step, bench, worktop etc) to reduce overall resistance. Gradually lower the incline as your get stronger.</p>
<p><i>Primary : Chest Secondary : Core, Shoulders, Triceps</i></p>	<p>Why : This compound exercise works to strengthen so many important muscle groups used throughout your running gait cycle as well as joint stability and strength, assuming you are performing with good form.</p>
<p>Superheroes</p>	<p>How : Lie face down on an exercise mat, arms and legs fully extended above your head and behind you. Lift your legs, arms and chest off the floor in one movement, creating an arch in your back. The tops of your legs and torso should still be in contact with the floor. Hold this position for 1-2 seconds before slowly returning to the start position.</p>
<p><i>Primary : Lower Back Secondary : Core</i></p>	<p>Why : This simple exercise targets one of the key PSSS muscles – the lower back.</p>
<p>Bird Dogs</p>	<p>How : Get into an 'all fours' position, knees below hips, wrists below shoulders. Engage your core and focus on a neutral, relaxed spine. At the same time extend your left leg and right arm so both are parallel to the floor. Keep your torso still and your head and back aligned. Gently lower to starting position for one rep.</p>
<p><i>Primary : Core, Lower Back Secondary : Glutes and Hip Flexors</i></p>	<p>Why : The incorporation of a dynamic motion such as this exercise improves stability, promotes good posture, increases range of motion all whilst strengthening major running muscle groups.</p>
<p>Plank & Side Planks</p>	<p>How : For the standard plank, get into a high plank position. Legs together and extended with your toes and balls of feet on the ground. Hands directly below shoulders with arms fully extended. Hold this position for the desired duration.</p> <p>For a side plank, lie on your side with legs fully extended, one resting on top of the other – ankle on ankle, knee on knee, hip above hip. Bend your arm on the ground so it is at a 90 degree angle and push up onto your elbow. Make sure it is directly below your shoulder. Balancing on your forearm, push your hips up so there is a straight line between upper shoulder and upper ankle. Hold this position for the desired duration.</p>
<p><i>Primary : Core & Obliques Secondary : Shoulders & Upper Back</i></p>	<p>Why : Both the standard and side planks work to build strength and stability in the muscles that support your spine and pelvis, helping you to run faster and prevent injury through better form.</p>

Exercise Explanation – Band Exercises

<p>Squat w/ Overhead Press</p>	<p>How : Stand as if you were going to do a squat but with one side of the resistance band under your feet. Gripping the other side of the band in your hands, bring your palms up to shoulder level, facing forwards. Perform a squat but as you push back up to standing, extend your arms above your head pushing the resistance band up. Slowly lower arms to their starting position for one rep.</p>
<p><i>Primary : Hamstrings, Quads & Shoulders</i> <i>Secondary : Core, Calves, Glutes & Hip Flexors</i></p>	<p>Why : Squatting with the resistance band will increase the effort required to perform the squat. Adding in the shoulder press engages additional muscle groups as well as coordination making this a super compound exercise.</p>
<p>Banded Deadlift</p>	<p>How : Stand on your resistance band with it doubled over, feet shoulder width apart. Bend down and grip the two ends of the band, push your hips back, engage your core and push your chest up and proud to flatten the back. This is your starting position. Contract your glutes and drive them forwards in order to stand up, stretching the resistance band as you go. Pause at the top before returning to the starting position. Reset your hips, shoulders, core and chest before repeating.</p>
<p><i>Primary : Glutes, Hip Flexors, Hamstrings</i> <i>Secondary : Lower back</i></p>	<p>Why : The isolated hip motion and extension that the deadlift requires reinforces the movement patterns we aim to achieve during our running gait. Correct form here also ensures work is done by the glutes and not the quads or calves.</p>
<p>Bent Over Rows</p>	<p>How : Stand on your resistance band with it doubled over, feet shoulder width apart. Bend slightly at the knees and forward at the hips, you want your back to be flat and close to parallel with the floor. Grip the two ends of the resistance band in each hand and engage your core. Pull the ends of the band up, bending your elbows and squeezing your shoulder blades. Pause briefly at the top before returning slowly to your starting position.</p>
<p><i>Primary : Lats</i> <i>Secondary : Core, Biceps</i></p>	<p>Why : Good back strength, particularly in our lats, is crucial for the stretch shortening cycle and the spinal spring systems. It also adds additional stability through the spine and pelvis.</p>
<p>Shoulder Front Raise</p>	<p>How : Stand on one side of the resistance band, feet close together. Grip the other end of the band in both hands, palms facing your body. Engage your core and flatten your back, maintain this posture the whole way through the movement. Keep your arms extended and raise them up in front of your body until they are at shoulder height. Lower back to starting position for one rep.</p>
<p><i>Primary : Shoulders</i> <i>Secondary :</i></p>	<p>Why : Strong shoulders mean a stronger arm drive. But they also aid the maintenance of good posture during running.</p>