



Running Drills

Running drills are not fitness intervals but rather create good running motion through perfect stride repetition

Cadence Drills:

These are drills which work to stimulate quick but more efficient stride turn-over. The goal is often to shorten the stride while increasing the step rate (i.e., steps per minute). These drills are critical to improving an individual's ability to run longer using less energy and limiting the pounding stresses found with running.

Examples:

1. Warm-up with an easy jog for 5 min. Find a soft surface like grass or soft track and practice increasing your stride rate by running intervals for the length of time it takes to count 30 left foot strikes. **Do this 6-8 times.** Your goal is to try and get your **30 left foot steps in less than 20 seconds.** The stride rate of 90 left foot strikes is your goal per minute. Recover for 1 minute between each stride interval. You can mix up the recovery by skipping and walking. The skipping will promote a spring to your step.
2. Or while on long runs try to continually check your form; shoot for a running cadence around **21+ left foot strikes in 15 seconds.** With practice and good form your goal is to maintain a higher cadence (88+ rpm) during the long runs.

Technique: Try to run with a normal flat footstrike with your weight toward the ball of foot (not on toes). Just before footstrike the foot should paw back slightly. Ultimately the drill process should create a more efficient running stride you're your longer runs by:

- Creating a more gentle foot touch to the ground.
- Decreased inefficiencies in your foot and leg motions.
- Less pounding and overuse of weak areas of the body.

The cadence drills are very important for the beginner and the injury prone athlete who is planning to run for distance while trying to avoid overuse.

Glider Drills:

These drills are like speed play or fartlek training. The glider drills work to allow for a smoother transition to different speeds and promote a coasting off your momentum. These can be done as part of your warm-up before a run or during a short or long run.

Example:

1. Warm-up for 5-10 minutes. Then start drill by jogging for 15 steps then jog a little faster for 15 more steps increasing to your regular running pace. Keep increasing the pace every 15 steps until you reach your race pace then begin to gradually slow down to a jog using momentum (not your energy) as long as you can. This is gliding... at the beginning you may only glide 4-5 steps. Eventually you may be able to go 20 or even 30 or more steps using only momentum.

This run can be performed on a downhill to help with the glide but try to incorporate flat course gliding at least a couple times during the week. To incorporate this into your everyday running think of "shifting gears" with a glide (using momentum) every time you change speeds. Try to avoid abrupt speed changes.

Speed drills:

Once you have mastered the glide and have developed your solid running base then it is time to look at pushing the stride a bit. These stride for speed drills will actually cause stride length to increase and foot strikes to be more explosive thereby increasing your running speed.

WARNING! Be careful though, forcing an increase in stride length can make your running even harder on the joints and less efficient, and as such for some of us, they may not be worth taking the risk of developing an overuse injury problem which can prevent us from running all together. This is especially true for those with existing injury or degenerative joint problems.

The following stride drills include a few of the Kenyan (used by Kenyan runners) drills recommended by Owen Anderson Ph.D. to increase your stride length and create a more explosive foot strike:

1. Quick hops. Do these on a soft surface only. Once or twice a week, in the middle of your workouts, **bound from foot to foot for about 30 meters at a time**. Try to maximize "air time" while minimizing the amount of time each foot spends on the ground. Make sure you cover more distance with these bounds than you would with your normal strides.
2. Boot camp hills. Find a steep hill that's at least 50-75 meters long, and run hill repeats on it once every couple of weeks. Alternate running up the hill at close to top speed with "bounding" up the hill more slowly, with an exaggerated vertical motion. Start with **6 repeats per workout and gradually increase to 10**. Between repeats, jog slowly back down to the bottom of the hill.
3. Hill hops. After you have finished with the Boot camp hills, **begin hopping up the hill on one foot for 15 hops**, then shift to the other foot for 15 more hops. Walk a few seconds to recover, and then repeat twice.