



HIGH PERFORMANCE

SPORTS MEDICINE

Bringing it back to the basics with your ABC's

The ABC's of running is a drill that was first created for sprinters but can be applied to runners. The purpose of the drill is to strengthen important muscles as well as help in the development of proper running form. Body awareness and mechanics are the first line of defense against injury. It is true that practice makes perfect and this exercise can help train your brain to run! It does this by training the correct muscles to fire in the correct sequence to ensure that we protect our bodies and run efficiently. Applying this to your running routine is a great way to build your confidence and improve your running performance.

The Drill:

Movements are performed with control and focus in a walking, running or skipping like action. Start slow and then build your speed and power.

Key words used below:

Core - "drawing your belly button to your spine from deep within"

Quadriceps- muscles at the front of the thigh responsible for bending the hip and straightening the knee

Hamstrings- muscles at the back of the thigh responsible for bending the knee and extending the hip

Tibialis Anterior- muscle at the front of the shin that flexes the ankle

A *The driving stage.*

Movement is propelled by the hip flexors and quadriceps muscles. The knee is brought up to about waist height at a 90 degree angle from the hip and knee. During this motion the pelvis will rotate. Be sure to engage your core by drawing your belly button in towards your spine and raising your pelvic floor. The arms are used to counter balance the action so that the arm opposite the leg is brought forward and the other one is placed behind the body with a bent elbow. Arms will swing forward and back like a pendulum. The focus should be on driving down the swing leg to the ground which initiates knee lift of the other leg. The quadriceps and the hamstrings drive this movement.

Focus on:

- + Core engagement.
- + Step forward.
- + Draw leg up to a 90 degree bend at the hip and knee.
- + Strong stance leg.
- + Arm swing in tandem with opposite leg and opposite to the other arm.
- + Driving the leg down with control of the quadriceps and hamstrings.

B *The foot impact stage.*

During this phase of the drill it is important to keep your foot in a controlled neutral position. This will be achieved by the contraction of the tibialis anterior muscle. You want to land the foot below your body in this neutral position. This will allow the impact forces to be spread out and absorbed across the foot and will also ensure optimal control of your foot motion. This is important so that there is less impact solely through the heel.

Focus on:

- + Absorbing the forces.
- + Neutral landing across the bottom of the foot.
- + The foot impacting the ground under the body.

C *The hamstring phase.*

In this stage the hamstrings are dominant and powerful. They will drive the leg down and on impact continue to contract to pull the foot up under your buttocks. By practicing this part of the movement you can shorten the length of time so another stride can commence and your running speed will improve. To advance this stage, the exercise is performed more rapidly and in a burst of power action. The arms are swinging quickly and higher, mimicking the faster movement of the legs. There is also an aspect of leaning your body forward as though you are

going to fall. This is similar to the position a sprinter would run in and it helps to facilitate the motion.

Focus on:

- + Core engagement.
- + Power and speed.
- + Hamstring contraction as you pull your foot upwards.
- + Leaning your torso forwards.

When and how often?

Practice the drill a few times per week. You can incorporate it into your running warm up, or set aside time at home or in the gym to train. I recommend practicing the sequencing for about 5-10 minutes. Go through each stage of the drill separately and then combine them into one drill. Make sure you are mindful of what your body is feeling and the muscles that are being used. This is a great way to warm up the mind and muscles for your run!

If you think you may have a running related injury or if you would like an assessment in order prevent an injury, you can book an assessment with either the Sports Medicine Doctor or with any of the Physiotherapists and Chiropractors at High Performance Sports Medicine (HPSM). We are conveniently located at the Yonge Eglinton Centre, 2300 Yonge Street, Suite 1604. For more information regarding our clinic and our approach to treatment please visit www.hpsm.ca. To book an appointment please email hello@hpsm.ca or call 416-486-4776 (HPSM).