

Born To Run Fast

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Many people have a preconceived notion that you are either born to be fast or not. Although an individual may have an inherent disadvantage with limb length, muscle attachments, and proportion of fast-twitch muscle fibers, most athletes can improve their running speed. For instance, a slow athlete may not become "fast" but he or she can and will become "faster" through proper training.

No matter what sport in which you are involved, there are nine components important to the improvement of your speed in sport:

- Reaction Time and Starting Ability
- Acceleration Time
- Stride Length
- Stride Rate (or frequency)
- Running Form
- Speed-endurance
- Strength
- Power
- Flexibility



These components are not equally important to athletes in all sports. However, success in speed improvement depends heavily on the length and rate of the athlete's stride. An athlete who can increase either of these two factors without offsetting the other will automatically improve his or her speed. To improve stride length, stride rate and the other seven components, an athlete's training program should include running technique drills, strength training, assisted running, resistive running, plyometric activities, and interval training.

The following drills can help you improve your stride length and stride rate. It is recommended that you choose a few to do as part of your warm-up. The drills should be done after some light running and thorough stretching. You should start with 2 sets of 10 yards of each of the drills you choose. As you improve and your body gets used to doing these drills, increase the length from 10 yards up to 40 yards gradually.

MARCHING NO ARMS

Concentrate on relaxing the upper body, alternate lifting knees as high as possible and staying on the balls of the feet. Don't lean back. Avoid twisting at the hips or shoulders. Remember, knee up, heel up, toe up.

MARCHING WITH ARMS

Arms bent at a 90 degree angle at the elbow. As the arm comes forward, the angle of the arm may decrease slightly. The hand should come to shoulder or mouth level. As the arm moves back, the

hand passes the hip. As the arm continues back, the angle of the arm may increase slightly. The hand should stop approximately one foot behind the body. March with the legs as done in "marching no arms." Remember, opposite arm with opposite leg.

MARCHING WITH BOUNCE ("A" SKIP)

Same as "marching with arms" but a short, quick skip is performed with each step forward. This is a drill involving rhythm.

FORELEG REACH ("B" SKIP)

Upper body remains relaxed. Lift one knee as performed for "marching." When the knee has reached its highest point, extend the foreleg forward. With the foreleg extended, paw the foot back to the ground directly under the body and repeat with the opposite leg while moving slowly forward. Don't lean back. Remember, knee up, foreleg reach, paw foot down.

BUTT KICKS

Upper body remains relaxed. Raise onto the balls of the feet. Heels are alternately raised to the buttocks while running slowly forward without lifting the knees. Concentrate on keeping the knees pointed down. Don't lift the knees.

HIGH KNEES NO ARMS

Upper body remains relaxed. Raise onto the balls of the feet and begin lifting the knees as high and as rapidly as possible while moving slowly forward. This differs from "marching no arms," because you should be moving the legs rapidly. Imagine how a football player runs through tires. Remember to stay out over the feet. Don't lean back!

HIGH KNEES WITH ARMS

Legs perform the same movement as in "high knees no arms," but the arms pump alternately with the legs. Opposite arm with opposite leg. Concentrate on taking small steps forward quickly.

HIGH KNEES FAST FREQUENCY

Same as "high knees with arms" except that the arms are pumped as fast as possible. Remember, the faster the arms are pumped, the faster the legs move!

To learn more about the key speed improvement areas, contact NIFS Athletic Performance at 317-274-3432, ext. 266.