

SPEED DEVELOPMENT TRAINING

By

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SPEED isn't just for track anymore... How many of you feel *SPEED* is a very important ingredient to the Success of your sport?

If you agree it is important, what are you doing on a regular basis to prepare your athletes to become faster?

When it comes to an athletes *SPEED*, I believe it starts from the ground up. First, for the athletes to excel in Speed Development, he or she must first learn to use "Dorsi-Flexion" with the foot. Most young athletes use "plantar Flexion". Plantar Flexion is BAD, because this downward pointing of the toe causes a braking effect upon contact with the ground. This is similar to putting the breaks in a moving car. Plantar Flexion keeps the athlete's foot on the ground maximizing ground time which translates into slower sprint or speed performances. This braking effect also puts a lot of strain on the ankle, shin, and most of all the hamstring muscles. I believe Plantar Flexion is the number one cause for athletes getting "SHIN SPLINTS".

Dorsi-Flexion is keeping the toe and the heel up while running. The runner is literally stretching the calf muscle while running. When running, the athletes pulls the heel through to the "buttocks" and then places it on the ground under the knee. When the athlete's foot lands on the track surface or the ground, the foot is then cycled backwards or pulled up to the buttocks. At this point the foot is then brought back down to the ground with again the (toe up) as it makes contact with the ground underneath the knee. A common mistake made by coaches is telling their athletes to take "longer strides" Over-striding causes a braking effect as the athletes often lands on the heel. The athletes also will lose power.

How does the use of Dorsi-Flexion make an athlete faster and why is it better than Plantar Flexion? Dorsi-Flexion makes the athlete much more active upon contact with the track and also allows the athletes to "get-off" the surface quicker. Rome wasn't built in a day and don't expect your athlete to pick this new technique up overnight. His bad habit was years in the making and it will take him weeks to correct it, but once he learns the term

Dorsi-Flexion, the athlete will be much more efficient in landing which minimizes ground time and airtime which translates into faster speed performances in any sport.

For the athlete to be able to run fast, they must run on the balls of their feet at all times. This means landing on the "widest part" of their foot each and every time. Athletes must also learn how to strengthen the tendons, ligaments and small muscle groups in the foot, ankle and below the knee if they are to be able to run on their toes. An Athletes body cannot be supported unless these areas are strong. Good exercises to strength the feet are as follows:

- Bare-foot running
- Sand-pit Plyometrics
- Weight-training exercises focusing below the Knee

If an athlete attempts to land and push off with their heel. They will never master *SPEED*. Remember! Unless you are planning on running a marathon, nothing good happens on your heel!

For an athlete to be able to maximize 100% of his leg power capabilities, the athlete must run "Hips Tall" over his hips at all times and keep all parts of his body near or under the Center of mass" at all times. I often see many young athletes shrink 3-6 inches while running because they are over rotating at the hips. This causes a loss of leg power and a 20-30% loss in true *SPEED* performance.

Proper arm action is important as well. The athlete must move the arms in a quick and efficient manner stopping his hand near the chin on shoulder on the upward motion and as the hips on the downward motion, Remember! A short lever is a quick lever; a long lever is a slow lever. To run fast, the athlete must have a "piston" type arm motion to maximize their *SPEED*! Two key points you should take note of are:

- 1) **The arms never cross the midpoint of the body**
Find the "midpoint" by drawing a line down the middle of your body to separate it into two equal parts. Crossing the mid-point with either the arms or the legs will cause slowing down *SPEED* performance because of inefficiency of movement.

- 2) **The elbows must be kept within 2-4 inches of the body at all times.** If the arms are too far away from the body, this “Chicken Wing” movement will cause the athlete to lose maximum *SPEED* performance.

Last but certainly not the least, is the posture for the upper body. The athlete’s shoulders must be kept low and relaxed at all times and the face and the jaw also must remain relaxed. The athlete’s head must also remain in its normal position as if he was merely standing in place. I refer to this as “Neutral Head Position”.

If the athlete drops his head slightly when running, it hinders the ability for a nice high knee lift when running. By dropping the head, the athlete will now lower his center of mass which can have a domino effect on the rest of his body causing his performance level to decline. To help the athlete keep his head up, have him raise his eyes and look forward 20-40 yards. Have him focus on an object that is 6-8 feet above the field or track. Doing this insures that his head and hips remain tall throughout the race.

If you would like much more information about *SPEED* Training, I would suggest you take a look at my recently completed “NEW” second edition book **“The World Class All-Sports Speed Development Program” (Book & DVD)** that shows all of the drills and explains the three different types of *SPEED* energy systems that should be used in *SPEED* Training. Plus this book contains a 16 week *SPEED* training program for football and a 16 week training program for sprinters. These workouts are designed in a “COOKBOOK” format. If interested in this book and DVD please call (972) 307-3545 or go to my website:

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Don’t forget that *SPEED* is a critical part of success in any sport!