

Deceleration Training Part 2

By Lee Taft

In part one of Deceleration Training, I spoke about the importance of being able to decelerate as a tactic to expose opponents “biting on a fake or move.” In this article, I want to talk about how to train for deceleration of multi-directional speed.

There is definitely a need to teach proper deceleration technique to avoid injuries and improve performance. Unfortunately, there is a lack of understanding on how deceleration angles need to be applied to be both safe and to improve performance.

I have actually seen techniques taught that COMPLETELY miss the point on angular deceleration for multi-directional speed. There are fundamental concepts and laws of movement that need to be applied to have proper execution during a deceleration move. This can't be completely understood without having an understanding of what form of deceleration is needed. Keep in mind, not all deceleration is stopping! Most of the time deceleration is cutting or changing directions while maintaining some level of speed. So you see, you must understand that decelerating to stop is different than decelerating to cut or change directions.

The important question is what differences are seen? Well, there are several things, the first being the position of the shoulders over the hips a split second after the initial foot contact of the cutting or stopping foot. During stopping, the shoulders will settle in vertically over the hips to maintain balance. If the athlete is cutting, the shoulders stay to the inside of the hips on an angle that is in line with the plant leg and allows the athlete to go in the desired direction. This allows the athlete to cut quickly without having a delay or swaying.

The next important physical aspect that will be used to aid in deceleration is the lowering of the hips or maintenance of hip height. If the athlete is going to stop, the hips must lower to create a better balance situation and to control momentum. If the athlete is going to make an oblique cut and needs to use it to escape the hips, don't actively lower. The hips may lower due to the angle of the cutting leg being outside of the vertical axis of the body which automatically lowers the hips. By not lowering the hips too much, the cut can be quick and allow the athlete to maintain speed. The last reason for lowering the hips would be if the cut is acute. If this is the case, the athlete will need to control speed by lowering the center of mass and slowing the body to allow the cut to be made without moving off the intended path of the cut.

The last physical aspect of decelerating that I will mention for this article is the synergistic movement of the hips and feet to make deceleration safe and effective. What I think I will do is outline for you the deceleration exercises that my athletes learn and practice on a daily basis when decelerating from linear running. I will talk about lateral some other time.

Deceleration Drills

Have the athlete run at ½ speeds for about 10 yards and decelerate at the cone. As the athletes get used to the movement, you can have them go full speed. The deceleration technique used is as follows:

- The athlete will turn the hip and the foot to the right or left to avoid any torque on the knee, ankle, and hip. The planting action looks like a stopping action of a lateral shuffle. As soon as the plant has occurred, the athlete will back pedal out of it back to the start. The next time, have the athlete turn the hip and foot to the opposite side. It is important to develop symmetry in planting.
- The next drill resembles the first except it is now random. As the athlete approaches the 10 yard cone, the coach will point to the right or left. The athlete must react and quickly turn that hip.

***NOTE: It is important to remember that the reason an athlete would decelerate and stop in order to go backward is because the ball or opponent is passing by or going over head. If the athlete were to plant the foot straight ahead with the hips and legs facing straight ahead, the recovery back would be way too slow and possibly dangerous if the athlete accidentally rotates the foot inward while the hips and legs are still straight.*

- The next drill is to have the athlete decelerate using the same technique above but now turn and run in the opposite direction. This resembles many sport situations, like a tennis player chasing down a lob; a softball or baseball outfielder redirecting for a pop fly; or a soccer player recovering from a long kick of the ball over the head.
- The final progression I will speak about in this article is forward and backward deceleration. This drill is just like the first drill, but now the athlete will backpedal to the start using good backpedal techniques (nose over toes), and at the starting position, the athlete will decelerate on the back pedal by planting the right or left foot behind the body as the shoulders move forward to allow for an acceleration back to the end 10 yard cone. So the drill is: run forward and decelerate; back pedal back to the start and decelerate; and finish back at the 10 yard cone. This is a great drill to see reversibility efforts by your athletes. Watch for high shoulders and poor planting technique. These two things will surely slow down your athletes' movement.

Please keep in mind that the technique and skills mentioned above about deceleration are a small percentage of the deceleration techniques that can and should be taught. I specifically spoke of decelerating from a linear run and back pedaling or running out of the deceleration. There are so many other stances and positions that an athlete must stop from. Athletes play defense in many positions directly related to the situation at hand. The quicker they can decelerate and recover or accelerate, the better athlete they will be.