

Unlike when he was winning grand Slams, now even John McEnroe works out off the court. He has to, both to compete and to avoid injuries. Among the many forms of training which have become prominent over the last two decades, many amateur and professional athletes are now using resistant equipment with greater and greater frequency to perform what is commonly known as overspeed training. One of the principles beyond this training method is to give athletes a kinesthetic experience that will become a new and more dynamic performance standard for them during actual competition. Another benefit from resistance training is that it builds both strength and endurance.

Here are nine tennis-specific exercises that can be used with the many types of resistance equipment available through fitness and conditioning equipment suppliers. The two main devices needed to perform these exercises are an elastic device (referred to in this article as a Power Resist System or PRS) and a non-elastic resistance device that is used to simulate a quick explosive response in sports (in this article called a Quick Release Sprinter or QRS).

1. **Resisted Let-go Sprint** – Let's start with an acceleration exercise called "resisted let goes," a must to include in any training program. It works on the key areas of proper sprinting form, leg strength, and stride length plus gives the athlete the feeling of tremendous acceleration at the let-go point. Have a partner hold back the designated runner with moderate resistance using a QRS for about 5 - 10 yards, with the runner leaning forward into a full pace sprint. Then the partner pulls the rip cord and the runner sprints for another 10 – 20 yards working on driving forward after the release. The explosive speed experienced immediately after the release gives any athlete a new performance standard to strive towards.
2. **Lateral Resisted Let-go** – In addition to forwards acceleration, tennis demands dynamic lateral movement as well. To develop an explosive first step to the ball, have a partner hold the runner back with moderate resistance using a QRS while the runner shuffles from one doubles sideline to the center of the court. When he or she reaches the center, the partner releases them and the runner performs a step-out followed by a crossover step into a full sprint for 10 yards working on an explosive drive. This exercise simulates a player recovering from a deep backhand.
3. **Power Resist Groundstrokes** – The next logical drill in this sequence helps develop muscular endurance by providing resistance as well as acceleration while assisting recovery speed. For this exercise connect a PRS to the fence and the player so that elastic resistance is created when the player moves forwards and wide to execute a groundstroke. After completion of the stroke the PRS automatically assists the player to recover quickly. Emphasis should be on proper balance at contact in addition to efficient recovery. If the athlete is pulled off balance, have him or her lower their running stance a one to three inches.

4. **Assisted Step-out Sprint** – Another use of resistance aids is for assisted sprinting, an exercise which trains the neuromuscular system by forcing the body to move at a faster than normal rate. Using a PRS, connect one end to the athlete's waist with the partner as the anchor. Have the assisted sprinter begin behind the baseline, with the holding partner standing off to the side of the court with the resistance band fully extended. On command from the holding partner, the assisted sprinter first executes a split step, then steps out to the forehand side with the outside foot and sprints toward the partner who is standing in the position just beyond where the ball would be struck. Research shows that after only 6-10 repetitions, 2-3 times per week for 8-12 weeks of this type of training, a player can improve the number of steps taken per second, their stride length, and their first step quickness to the ball.
5. **Assisted Crossover Shuffle** - This next exercise is a specific drill to develop both efficient and speedy recovery on groundstrokes. Again, using an elastic resistance system, connect one end to the runner and have a partner hold the other end. Have the runner begin at the singles sideline on the baseline while the partner becomes the anchor, standing inside the court with the PRS fully extended. On command, the player executes a few crossover steps and then shuffles back towards his or her partner for the last few steps.
6. **High Forehand Assist** – Now let's take this assisting sprinting concept to a different level, actually hitting aggressive balls. Now have the holding partner in front and slightly to the side of the hitter to offer resistance against the forwards movement required for high short forehands with the assisted acceleration provided by the Power Resist Trainer. It also has the secondary benefit of forcing the player to make contact at a high point (and also above the cord from the PRS), an essential ingredient in successfully hitting winners off high short balls. Make sure the feeder across the net allows for proper recovery in between hits before feeding the next ball.
7. **Assisted Split Step and Volley** – A split step is used to pause momentarily, not to become totally set. The assisted pull of the PRS can also be used to force players to keep upper body momentum going forward into the volley as well as also aid the player in accelerating towards the net. Connect one end to the volleyer and connect the other end to the bottom of the center strap at the net. Have the assisted player begin in the middle of the court behind the service line with the PRS fully extended. On command from a feeder on the other side of the net, the assisted player sprints forward a few steps, then splits again as the ball is fed before executing a volley.
8. **Power Resist Sprint** – Another creative way to use a resistance device is to help athletes speed up their stride rate. This particular exercise requires an agility ladder (you know, the kind that rests on the ground for footwork exercises). First, time the player's sprint through the ladder without using any resistance at all. Then, have the same player begin at one end of the ladder attached to a PRS with

their partner at the other end holding the band fully outstretched. Running through the ladder with the assistance of the PRS should speed up their time considerably. Then have the player sprint through the ladder once again as quickly as possible without resistance equipment. And, then again have the player run through using the PRS. The moderate pull from the resistance band makes the player pick his or her feet up and place them down faster. Finally, time the player's sprint through the ladder again without the equipment. Performing this simple but dynamic drill a couple of times each week can produce noticeable results.

9. **Slingshot Overhead** - This next drill can be performed with one player connected to a PRS and the other held either by a partner kneeling at the net, or directly connected to the bottom of the center strap at the net. The player begins by moving backward as if he or she was hitting an overhead. As the player moves back toward the service line the tension of the elastic band increases. The player executes a shadow swing overhead and is assisted back to the net by the pull of the equipment. Have them perform the exercise for about 6 - 8 repetitions. Once they've mastered this drill without hitting a ball, try it with actually feeding balls. Then, it is important to remember to take away the equipment after 6-8 of these repetitions and have the player immediately hit balls again. The resultant feeling of lightness and speed will leave a lasting impression that the player will know have as a new performance standard.

Final Notes:

1. Like any training equipment, resistance training should always be performed under the supervision of a trained professional, adhering to standard safety concerns.
2. Don't think that only the most competitive athletes should work on and will benefit from overspeed training. In fact, players of all levels will benefit from the extra conditioning levels they will achieve through overspeed training and, when their movement on the court improves, their tennis will automatically improve as well.