

Fit to Play™

Fast Feet Training

by Carl Petersen BPE, BSc (PT) & Nina Nittinger

Tennis requires quick movements that pass through many planes of motion and use numerous joints and muscles at the same time.

Some of the greatest tennis players are noted for their agility and natural speed on court. Speed of court coverage, rather than just strokes is one important quality. Strokes may fail when the body and racquet are in the wrong position relative to the ball. The key to good play is therefore speed and good fast footwork. Having good balance and a strong dynamic core improves stability on court, preventing injury and optimizing performance.

Tips to improve on-court speed

Proper Footwear

Each surface – hard court, grass, sand (clay), carpet (synthetic) requires different construction and tread.

- Ensure proper size, adequate toe box room, and the correct shoe for your foot (supinator or pronator).
- Shoes designed for another sport that have the wrong tread pattern do not optimize movement.

Stay on the balls of your feet and constantly keep moving

- This keeps you in balance and ready to move quickly in all directions.

Widen your stance

- The pros stand poised in an athletic stance with their feet further apart than

their shoulders, ready to drop and drive in order to move quickly for the next shot.

Stutter or split step when your opponent hits

- It doesn't matter where you are on court, always stutter or split step just before your opponent hits the ball.
- This allows you to move quickly in any direction.

Always move faster than the ball

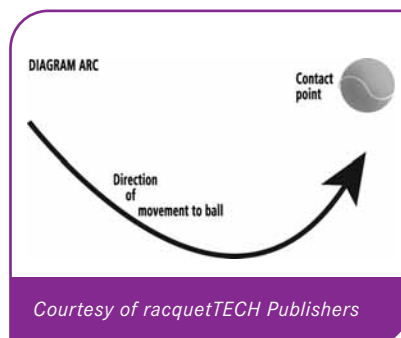
- Moving fast and preparing early for the oncoming ball gives you more time to get set up.
- The faster you move, the better you can prepare for the shot, adjust for the bounce, and decide what shot to hit in return.

Arc with smaller steps as you get near ball

- Use a path to the contact or hitting point that allows a small arc.
- Arcing behind the area where you want to contact the ball allows you to be moving forward at contact.

Avoid running straight toward the ball

- Taking smaller steps as you get close to



the contact point allows you to get into the right position to shift your weight forward as you hit.

Hit and move

- Hit and keep moving, then recover if needed, then watch to see what happens, but keep the feet moving like a boxer.
- It is estimated that club players move their feet 4–6 times between shots whereas pros move them 10–12 times.
- The pros obviously are more likely to be in position for the next shot.

Gain time by hitting slower or with more looped topspin or slice

- Players believe that the faster they hit the ball, the less time their opponent will have to react.
- This may be true, but, unfortunately, opponents are able to return faster balls sooner, giving you less time, not more, unless of course you hit a winner or strong forcing shot.
- Be smart about the type of shots you return to allow yourself adequate time.

Run down every ball

- To improve your speed and fitness, even if a ball is wide or long, run it down and move to get into position to hit it.
- Running down wide, long, or short balls in practice will give you the confidence to go after them when you play.

Fast Feet Training Exercises

Create a menu of exercises using these ideas and your imagination and make up an agility circuit that fits your particular needs. Exercises can be varied depending on the setting and equipment available to you.

Try doing 1-2 sets of 6-8 exercises for 10-15 seconds, with a 45-50 second rest between. Change the venue to keep interesting using the track, beach, gym, forest trail or do your exercises beside the court.

Some form of warm-up should be done before doing any drills. Methodically warming the body's tissues helps prevent injuries that may be caused by going too hard, too fast, too soon with cold, unlubricated muscles and joints.

General Warm-Up

Do several sets of 10 reps of arm and leg swings, front to back, side to side and in a figure of 8 motion. As well do some high knees, high heels, crossovers and side shuffle steps to add to the hip and leg warm-up.

Speed Warm-Up: Skipping, Sewing machines & Alternating lunges

Make sure that the central nervous system (CNS) is firing properly by doing some skipping trying to minimize ground contact. Here is a speed warm up that will help trigger the CNS. Do running on the spot "sewing machines" for 3 x 10 seconds at a medium tempo (60 % of full speed). Follow these with



2-3 x "sewing machine" accelerations, start slow and gradually increase up to 80 % of your full speed at the 10 sec. mark. Next, do the same thing, only accelerate to 90% full speed at the 10 second mark and maintain for 2-3 sec. Now try doing 2 sets of 10 alternating lunges.



add more resistance place the lines on a hill. You work against resistance when you move up the hill and you will have to control deceleration when you come back down. Concentrate on quick steps and maintaining speed throughout (C).

Hand Clap Reaction Drills

Stand on the service T in a ready position with a training partner at the net. The partner claps hands and then points in the direction you must move to as quickly as possible. Split step on the clap, then, just like in a match, side step, backpedal, or sprint forward



Suicide Line Drills

Start on one side of a tennis or other court with lines on it or make your own lines with chalk or tape that are 1, 2, 4, 6 & 8 meters apart. Sprint to each line on the court and back. Do two sets per side. If you want to



Hand clap direction changes. Vary the length of the movements by going 2, 4, or 6 steps.

depending on the direction pointed. Start without a racquet in hand and then progress to carrying your racquet.

Start with 20–30 second drills and gradually build up the number of repetitions. Recovery time between reps should be the same as that between points.

Resistance tubing can be added to increase the effort required in direction changes, acceleration, and deceleration. It can be held at the back or sides by a training partner

Towel-Ball Shuttle

This can be done with two players competing or by yourself. Have 2–5 towels (rolled in a circle) to hold tennis balls. Spread them apart anywhere from 3–10 feet in a straight line and place a number balls at one or both ends, depending on whether you are doing the drill alone or with a partner.

Start at one end. The players must move laterally to the opposite end and pick up a ball from towel 1 and move it to towel 2 and move back to towel 1 and pick up another

ball and move it to towel 3, etc. Time yourself or compete with a friend. Change sides and repeat the drill. You can work the anaerobic energy system by increasing the number of balls at the end towel and doing repeats of the drill for between 30–60 seconds.

You can change the drill by changing the number of towels to run back and forth or by using either a side shuffle or crossover step.

Have the players work on hand coordination by having to use only one hand to pick up balls, either dominant or non-dominant. This drill can be done holding a racquet in one hand, or, for more external resistance, add a waist harness and elastic cord that a partner controls.

Resistance Tube Running

Improve explosive power and endurance by running with a harness around your waist



attached to heavy stretch cord or have a partner apply resistance while you start sprinting in place with good form (high knees and pumping arms). Now sprint with high knees for 10–15 seconds keeping good sprint form. Repeat 4–6 times with a rest of 30 seconds between sprints. This drill can

be done incorporating lateral movements like side shuffles and skips as well (6)

Resistance Tube Precautions

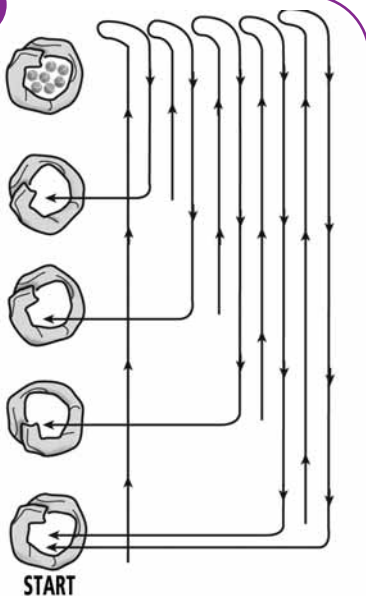
- Ensure it is of high quality.
- Inspect the tubing regularly for wear or weak spots.
- Ensure that it is either attached to something stable with all attachments secure and safe or held by a partner you trust.
- Use an appropriate waist belt or harness.
- You want the length of the tube to be such that there is a small amount of tension when you are closest to the attachment, but enough flexibility to allow you to get the full range of motion you are exercising in.

Fit to Play™ - Training Tips

- Treat your “fast feet” training as part of your overall program to improve tennis.
- Try using other sports like soccer, ultimate Frisbee, or touch rugby to improve coordination.
- Try unfamiliar sports to improve your coordination and confidence.
- Do fast feet training 2–4 times per week. Always begin with a dynamic warm-up.
- Remember—warm-up to play, don’t play to warm-up.

Carl Petersen P.T. is a Partner and the Director of High Performance Training at City Sports & Physiotherapy Clinics. He and Coach / Exercise Model Nina Nittinger who coaches in Davos, Switzerland have written Fit to Play Tennis-High Performance Training Tips. Info on there new DVD series at www.citysportsphysio.com or e-mail carl@citysportsphysio.com •

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