

## Medicine for More Power!

Players of any level will find huge benefits in training with a medicine ball.

By Allistair McCaw

**T**hink of the blistering serve of Andy Roddick, the powerful drive of Tiger Woods or the pitching action of a major league baseball player and you'll notice they all something in common - rotational power.

Developing these explosive rotational sports skills relies not just on innate ability and technique, but also on specialist conditioning drills and methods. The good news is there is one piece of equipment that's inexpensive, versatile and available to all of us - the medicine ball.

A medicine ball can provide the tennis player of any level with a complete total body workout and increase their functional strength related to their specific strokes. In fact, the medicine ball as a tool for power development is unparalleled.

In training players ranging in level from juniors to tour professionals, I've found no other training mode provides the specific strength and power potential of the medicine ball.

A medicine ball offers a player the opportunity to develop rotational power and mimic the actions related to their strokes. For example, throwing a ball against a wall and catching it again will increase elasticity and strength in the upper body, core, hips and legs. This in turn will translate to increased hitting power and help decrease the stress placed upon the 'over used' areas like the shoulders and rotators.

It is an excellent tool for rotator cuff deceleration training, upper body power, total body power, and rotational power in the torso. A program designed around proper medicine ball progressions will develop explosive power in both flexion and rotation safely and effectively.

### Choosing The Right Ball

Before starting any program with a medicine ball, the key is proper ball selection. Most people think heavier is better, which is wrong. Velocity is the key. If a player struggles to throw a ball, it is too heavy. Emphasis should be on speed of movement, not ball weight.

Guidelines for choosing a medicine ball:

Player weight:	Suggested ball weight range:
Under 50kg	1-2kg
50-60kg	2kg
60-70kg	2-3kg
70-80kg	3-4kg
80kg +	3-5kg

### On With the Program

The following program will provide players of any level with a total body workout. As always, make sure before commencing any workout to have a 10-15 minute dynamic warm up with some light cardio or basic agility movements and dynamic stretches. This program can be done twice a week, supplemented with your other physical training activities.

Start slowly and progress firstly by increasing reps or sets before increasing ball weight. Then watch your game climb to the next level, but be warned: you'll have to control your newfound power!

### Foot on Ball Hip Lift



This exercise works the glutes and hamstrings as hip extensors. Don't be surprised if you start to cramp in the hamstring, this means you are not firing your glute (your butt) muscles enough. If performing this exercise on a medicine ball is difficult, then start with your foot on the ground only.

**Your turn:** Lie in the supine position with one leg bent with your other foot placed on the ball. Hands are firmly placed on the floor alongside you. Lift yourself off the floor by firstly firing your glute muscles and raising the lower back away from the floor. Perform 2 sets of 10 reps per leg. Hold in the finish (up) position for 2-3seconds.

### Lunge Walk with Rotation



This exercise works the glutes, hip flexors, quadriceps, arms and the core area. I sometimes have my players use this exercise as a dynamic warm up for the rest of their routine as it hits so many muscles in the body.

**Your turn:** Maintaining good posture and balance, drop into a forward lunge. As your front foot is touching down, explosively rotate your torso to the side with straight arms (ball in hands). Then continue onto the next lunge by walking forward alternating the rotation to the other side. Perform 2 sets of 20-30 reps.

### Med Ball Push Up

The push up is one of the most underrated exercises in the upper body program. Medicine ball push ups are great for tennis players as they not only increase torso strength but also challenges the shoulder and wrist stability.

**Your turn:** Starting in the push up position with one hand on the ball, slowly lower yourself until elbows are bent at 90 degrees. Explosively push yourself back into the "up" position.

For the more advanced, you can alternate arms after each rep by rolling the ball to the other side. Stay in the "up" position when rolling the ball to the other side. Perform 2 sets of 10 reps or for the more advanced 20 reps.

## Reverse Crunch



This exercise works both the upper and lower parts of your abdominals as well as the hip flexors. It not only strengthens, but also lengthens (stretches) out the abdominals. In tennis the core area is required to explosively rotate, stretch and decelerate (stabilize), so muscles in this area need to be loose, long and strong!

**Your turn:** Lying in the supine position on a bench firmly grip the bench just above your head. Place the ball between your knees and squeeze to hold.

With slightly bent legs, begin by firing the hips and lifting your lower back off the bench, bringing the knees inwards to your chin. Then slowly extend the legs out to about 45 degree's (as seen in photo). Perform 2 sets of 15 or for the more advanced 20-30 reps.

## Single Leg Bench Squat with Rotation



This exercise is very similar to the lunge walk with rotation exercise in terms of the muscles used, but hits the glutes and quadriceps a bit more. With having to stand on one leg and rotate the torso, this exercise will really test your balance and work the ligaments and tendons of the ankle.

**Your turn:** Ball in hands with out stretched arms, place one foot in front of you on the ground and the other behind you on the bench in a split squat position. Now bend your front leg into a squat and rotate to both sides before returning to the start (up) position again. Perform 2 sets of 10 reps per leg or for the more advanced 15-20 reps per leg.

## Reverse Leg X-Over Squat



Tennis can sometimes get you into strange and awkward positions. That's why I believe it's important to train the muscles with exercises that can be termed "uncomfortable" or "unusual". This exercise tests the functionality of single leg strength in a reverse x-over pattern. It also helps to improve

your balance skills, for example, if you have been pulled out wide during a rally, you need to decelerate speed, maintain control and balance to recover efficiently back to the middle.

**Your turn:** Standing on a bench with arms (ball in hands) stretched out to the right side, take your left foot off the bench and slowly lower it to behind your right. Your right leg will be going into a squat by bending the knee. Return to start position and complete the same to the left side. Perform 2 sets of 10 reps per leg or for the more advanced 15-20 reps.

## Russian Twist on Swiss Ball



This exercise works the core, shoulders and hip flexors. By doing this exercise on a swiss ball it combines the elements of stabilization with rotation. It also requires the hips to remain in a raised position during the exercise.

**Your turn:** Lying with the shoulders on the ball and with feet on the floor, the action is to roll on the Swiss ball from the tip of the right shoulder to the left shoulder. Maintain straight arms with ball in hands whilst rotating from side to side. Perform two sets of 20 reps.

## Against The Wall Throws



There is no better way to mimic a tennis specific movement and improve rotational power than to throw a medicine ball against a wall. With tennis specific throws that involve rotation, the player can throw as hard as possible against the wall with balls in the 2-5kg range to develop true power in the core and hips.

The rubber medicine balls now available combined with a wall are excellent for these applications due to the elasticity of the ball.

**Your turn:** Standing 2-3 metres away from a wall, get yourself in an:

- Open stance position
- Closed stance position

Try to catch the ball either without a bounce or stand back and catch the ball with one bounce only. Perform two sets of 10-15 throws per side (backhand & forehand sides). ●

*Specializing in high performance tennis conditioning, Allistair McCaw has worked with a number of top 20 players on the professional tour including Nathalie Dechy, Karolina Sprem, and Jamea Jackson. For more information go to: [www.PerformanceTennis.com](http://www.PerformanceTennis.com)*