



## Medicine Ball Routine

General Warnings: Si-Boards balls bounce with extreme energy resulting in a unique plyometric effect. **These exercise movements are very ballistic, require fast reflexes and will cause soreness for first time users.** The following exercises are specific to the function of Si-Boards balls. You can perform other common medicine ball exercises not listed.

- Instruct clients to pay attention and keep focus on the ball when doing exercises. Use caution with all overhead exercises.
- We recommend using exercise gloves. Catching the balls takes a little practice. Let the ball spin in your hand and slow down the momentum upon catching.
- Complete a general warm-up followed by a dynamic warm-up. Finish with a cool down.
- Exercise progression is vital to learn hand and eye coordination. Beginners have slower movements with less coordination until they learn body control.
- These exercises require trunk stabilization. It is important to teach correct form and trunk contraction upon catching/throwing a ball.
- Most of these exercises involve the anterior trunk muscles. It is important to strengthen the back, external rotators and shoulder stabilizers to balance out these exercises.
- With any of these movements you can create additional challenge by holding your position as you catch the ball, changing your foot position, or adding squats/lunges. These must be progressed into from the original exercise.
- When the ball picks up speed and momentum it requires great strength, coordination and stabilization to control the ball. Injury may result when the body is tired and proper form deteriorates.

General Warm-Up into Dynamic Warm-Up: Do 5-10 of each or until clients are ready.

1. **Arm Circles-** Circle your arm forward and backward.
2. **Arm Circles w/Bounce-** Circle your arm forward then bounce ball on ground. Catch, hold and repeat. Work in different shoulder angles. Alternate arms.
3. **Backstroke w/Bounce-** Stand facing a wall and backstroke your arm. Throw ball off the wall at the end of the backstroke. Catch ball in opposite arm, backstroke and throw off wall. If a wall is not available you can toss the ball in the air at the end of the backstroke.

4. **Dribbling-** Dribble the ball with one hand in front of your body. Then switch arms and continue to dribble. Move your arms wider for an ultra wide dribble. Add dribbling between your legs.
5. **Clock Throws-** Stand facing a wall and start with two handed throws. Throw the ball at 12, 1, 2, 3... o'clock positions. Use all positions and work in side rotations and side bending. Positions 11, 12 and 1 should be overhead, 3 and 9 should be side rotation and positions 5, 6 and 7 should be underhand tosses.
6. **Chest and Underhand Pass w/Squat-** Stand facing the wall and toss the ball overhead while in a semi-squat position, then toss underhand. Next coordinate overhead and underhand tosses with full squats. One pass = one squat.
7. **Overhead Throw w/Hop-** Stand facing the wall and overhead throw against wall. Catch overhead and repeat. Add hops when catching or throwing. One throw = one hop.
8. **Tennis Stroke w/Shuffle-** This two handed throw against the wall simulates tennis backhand and forehand strokes. With two hands take the ball to your side as you step forward. As you follow-through and throw to the wall shift your weight from your back foot to the front foot. Throw the ball at an angle and you shuffle left and right. Alternate arms
9. **Softball Pitch-** Caution with this exercise, you can really get the ball going fast. This one handed throw against the wall simulates a softball pitch. Swing one hand backward and then forward. Release the ball against the wall and then catch. Work in slight body rotations. Alternate arms.
10. **Baseball Pitch-** Caution with this exercise, this should be done with the smallest balls (3" or 5"). This one handed throw against the wall simulates a baseball throw. Stand facing a wall and open your shoulder position to 90° with 90° of elbow flexion. Internally rotate your shoulder and throw the ball against the wall. Catch and throw again. You can work different shoulder and elbow angles. Alternate arms.

Exercises Sequences: Do 5-10 of each exercise or with timed stations

1. **3 Hole Punch-** Stand facing wall 45° and imagine punching holes into the wall with ball throws. Throw down into the ground and close to the corner. The ball should bounce off the back wall to chest height. Catch the ball and throw straight forward. Catch the ball and throw upward like a shot put. Work in body rotation with a split stance and weight shift as you throw.
2. **Biceps/Triceps Mix-Up-** Stand facing wall in quarter squat position. Using both hands bounce ball on the ground with triceps presses. Move to underhand tossing the ball against wall starting between your legs. Move to overhead chest passes. Follow with overhead tosses. Progress from quarter squat position to complete squat repetitions, split step stance with weight shift and to overhead tosses with jumps. One squat = one throw.
3. **Bounce Pass-** Stand facing the wall. Step and bounce pass the ball on the ground. The ball will bounce off the back wall and come back to you at chest height. Work in ball fakes, overhead movement and pivoting before throwing.

4. **Seated Chest and Overhead Passes-** Sit and face the wall. Chest pass with two hands and catch after the bounce. Then overhead pass against the wall. Change to one handed passes. Do these with your feet on the ground or feet in the air. Add a catch and hold for added stability.
5. **Seated Rotations-** Sit along the wall. Rotate from your left side and throw to the right against the wall. Catch while rotating to the left and throw to the right again. Switch sides. Do these with your feet on the ground or feet in the air. Add a catch and hold for added stability.
6. **Soccer Throw-** Stand facing wall. Step and throw the ball on the ground close to the wall. The throw is an overhead throw. The ball will bounce off the back wall and you will have to catch it overhead. Exchange your feet with the right foot stepping then the left foot stepping.
7. **Standing Rotations w/Bounce-** While standing bounce the ball to the right side of your body. As the ball rebounds guide it above your head to the left side and bounce it next to the left side of your body. Continue to alternate sides. Add squats for full body motion. Your trunk will rotate and side bend.
8. **Crab Walks w/Gambetta Band and Bounces-** While in a semi squat position and with a resistance band around your ankles, crab walk sideways. Side step to the right with your right foot, bounce the ball and sidestep to the right with your left foot. Progress with lifting the ball overhead and bouncing. Always keep tension on the band and keep your feet at least shoulder width apart.
9. **Reverse Pivot w/Bounce-** Caution with this exercise for those with knee or meniscus injury. Get into a semi-squat position and reverse pivot while walking or skipping backward. With each step backward bounce the ball on the ground. Work in trunk rotations and progress this exercise with a Gambetta band.

Super Dynamic Movements: Need a proper warm-up and focus. Do 5-10 reps or with times stations.

1. **Tennis Stroke w/Backpedal-** Continue the tennis stroke movement and throw harder against the wall. As you throw take two steps forward and let the ball bounce off the wall. Then quickly backpedal and catch the ball either before or after the bounce. Rotate, throw the ball off the wall and take two steps forward. Continue to throw and backpedal.
2. **Clean and Jerk-** Starting in a wide squat stance underhand thrust the ball straight up and into the air. Let it bounce once, get underneath the ball and catch. Upon catching bring the ball to your chest and thrust upward into the air like volleyball setting. Let the ball bounce once and catch. Upon the catch underhand thrust again.
3. **Clean and Jerk w/Sprint-** Complete the same Clean and Jerk sequence except when you chest press the ball upward throw it forward about a foot. Hold your position until the ball bounces after the chest press. When the ball bounces sprint to the ball and catch it before it bounces again. Clean and Jerk again. Progress this exercise with a three point sprinting stance. You can also throw this ball at an angle and sprint to the right or left.

4. **Jackhammer**- Start with a quarter squat stance and throw the ball toward the ground with a triceps push. Keep the ball close to your body then gradually extend your arms straight out. Then continue to bounce higher until your arms are fully extended over your head. When the ball is over your head fully extend your body and control the ball back down to the ground.
5. **Jackhammer and Hold**- Start with the Jackhammer movement then catch and hold the ball when it returns to your hands. The upward thrust of the ball requires body stabilization to hold the ball. Hold the position for one second.
6. **Jackhammer w/Shuffle**- Stand with a semi-squat position and bounce the ball with a triceps push. Coordinate your body to shuffle right while bouncing. Then shuffle left. Progress this exercise with diagonal shuffling and jumping left and right.
7. **Jackhammer and Jump**- Start with the Jackhammer movement with a squat position. As the ball comes up, jump up to catch the ball. Continue to jump each time you catch the ball.
8. **Ball Slams**- Caution with this exercise! Slam the ball on the ground and let it bounce above your head. Once the ball comes down it will bounce again. Catch as it comes back up after the bounce and slam on the ground again.
9. **Ball Slams and Hold**- Slam the ball on the ground and let it bounce above your head. When the ball returns towards the ground catch and hold. Hold for one second. This is the reverse of the Jackhammer and Hold. You are catching the ball on its way back down before it bounces.
10. **Ball Slam and Jerk**- Slam the ball on the ground and let it bounce. As the ball returns back down squat and get underneath it. Bring the ball to your chest and push upward. Let the ball bounce back into your hands and slam again. This can be done with one hand or two.
11. **Ball Slams and Sprint**- Slam the ball on the ground a foot in front of you. Hold your position until the ball comes down and bounces for the first time after the slam. Then sprint to the ball and catch before it bounces again. The further out you throw the greater distance you will sprint. Progress this exercise with a three point sprinting stance.
12. **Ball Slams, Jerk and Sprint**- Complete the previous Ball Slam and Jerk. When you Jerk the ball upward throw a foot ahead of you. Hold your position until the ball bounces. Then sprint and catch the ball before it bounces again. Progress this exercise by getting into a sprinting stance or three point stance. You can also throw the ball to the left or right and sprint diagonal.
13. **Rebounding**- Caution with this exercise for hand-eye coordination. Hop-step and throw the ball on the ground in the corner. The ball should bounce off the back wall and rebound over your head. Jump to catch the rebound and follow with a hop-step and throw.
14. **Soccer Throw and Backpedal**- Stand a few feet back from the wall and take a hop-step or a few running steps. Throw the ball hard on the ground and close to the corner. The ball will bounce off the wall and over your head. Shuffle backwards to catch the ball. Run a few steps forward and throw again.

- 15. One Arm Snatch-** Squat and toss the ball straight into the air- either underhand or overhand. As you toss into the air explode upward with your squat. As the ball bounces squat underneath it and cradle the ball in your hand like a shot put. Then push the ball upward into the air and you explode upward with your squat. Catch the ball after it bounces and toss in the air again.
- 16. Walking Lunge w/Bounce-** As you do walking lunges you will bounce the ball. Beginners should put the left foot forward and rotate the trunk to the right and bounce the ball to the inside of your left foot. Lung forward with your right foot, rotate your trunk to the left and bounce to the inside of your right foot. As you progress, lunge forward with the right foot, rotate the trunk to the right and bounce the ball to the outside of the right foot. Continue to alternate.
- 17. Walking Lunge w/Double Bounce-** Integrate left and right rotations with each lunge. As you step forward with the right foot, bounce the ball to the inside of the right foot. As you drop your back leg down rotate to the right and bounce the ball to the outside of the right foot. You will bounce the ball to the inside and outside of each foot for each step.
- 18. Lunge Jumps w/Bounce-** Beginners should lunge jump and alternate their feet while bouncing the ball to the inside of the forward foot. If your right foot is forward, rotate your trunk to the left and bounce to the left side of your body. As you progress, bounce the ball to the outside of your forward foot. This requires great trunk rotation in opposite directions to the hips. Continue to alternate.
- 19. Lunge Jump w/Throws-** While lunge jumping and alternating feet throw the ball off the wall. You can either throw to the front or to the side with rotation. Rotate and throw to the right side with either your right foot or left foot forward. Continue to alternate.
- 20. Backward Thrusters-** Stand with your back to the wall at least 15 feet away. Start in a wide squat stance and underhand thrust the ball overhead and backward. Turn around and catch the ball as it returns off the wall. Thrust again.
- 21. Diagonal Backward Thrusters w/Shuffle-** Stand with your back to the wall at least 15 feet away. Instead of thrusting backward directly over your head you thrust in a diagonal pattern over your shoulder. Turn around and shuffle left or right to catch the ball return.
- 22. Wall Agility-** This can be done facing the wall or being centered between two walls. Hop-step and throw overhead against the ground and close to the corner. The ball will bounce off the back wall and over your head. Turn around and catch the ball then hop-step and throw off the back wall. Continue to alternate. If you don't have a back wall then throw at least 15 feet away from the wall.
- 23. Wall Agility Game-** This is a fun game on a handball or racquetball court. The object is to throw the ball on the ground and close to the wall. The ball will bounce off the back wall and fly high in the air. As the next person catches the ball they are only allowed to take 3 steps before they throw toward the wall. The harder you throw the further the next person is from the wall. If you miss catching the ball or can't bounce the ball off the back wall a point is rewarded to the competitor.

Cool Down Exercises: It's important to cool down and do posterior shoulder, external rotation and back exercises.

- 1. Shoulder External Rotations-** With your elbow at 90° and shoulder at side, rotate your shoulder outward. Do the same with the shoulder at 90° abduction and rotate shoulder and hand backward. Return to starting position and repeat.
- 2. Shoulder Diagonal Pulls-** Start with your right hand on your left hip and pull your right hand across your body and over your head. The movement is similar to drawing a sword. Return to starting position and repeat.
- 3. Three Way Butterfly-** With your thumbs upward and your hands by your side, raise your arms to shoulder height. Your arms should be straight out in front of you and return to the starting position. Then raise your arms at a 45° angle and finally finish at an 80° angle. The finish angle is an open fly position.
- 4. Reverse Flies-** Bend over slightly for gravitational pull. Start with your hands together and reverse fly. Squeeze your shoulder blades together. Return to the starting position and repeat.