

## Webster Chiropractic Care

Dr. Alaina Keem and Dr. Matthew Keem

585-872-9211

### What size ball should you buy?

That depends on your height.

If you are 4' 11" - 5' 3", you should use a 55 cm. exercise ball.

If you are 5' 4" - 5' 10", you should use a 65 cm. exercise ball.

If you are 5' 11" and up, you should use a 75 cm. exercise ball.

Although boxes for new balls offer size recommendations for your height or weight the general rule of thumb states that when sitting down on one your upper thighs should be parallel to the floor.

The second thing to pay attention to is the quality of the ball. I only recommend purchasing balls that are anti-burst or burst resistant. These balls are made from a higher quality plastic than regular exercise balls.

Not only is overall core strength important, just as valuable is core muscle coordination. Exercises that place the body in an unbalanced position help to develop the needed strength and coordination needed for the core muscles to function properly. These exercises must also be performed properly: the spine must be held in a neutral position with appropriate **pelvic tilt**.

The core has been defined as the lumbo-pelvic-hip complex or (LPHC). It is where the body's center of gravity is located and from where all movement originates. Proper recruitment of these muscles not only ensures proper acceleration, deceleration and stabilization during exercise, but also aides in preventing possible injuries.

The core or LPHC is made up of two categories of muscle groups.

1) the stabilization system-inside muscle group

2) the movement system-outside muscle group

The stabilization system is responsible for the stability of the LPHC and includes the abs, , lumbar, pelvic muscles, and diaphragm. The movement system consists of the lats, hamstrings, hip adductors, hip abductors, rectus abdominals, and external oblique.

**Each of these exercises is performed with a 5 to 10 second hold. Begin by performing 3 sets of 10 repetitions and increase numbers as strength, technique, and endurance improve, working towards completing 3 sets of 20. Pick 3 different ones to complete each day.**

1. **Proper Sitting Position** - Sit on the ball with your back straight and your feet shoulder width apart. Make sure that you do not lean forward or lean back while in the seated position. When you're doing exercises on your ball, you want to make sure that you tighten your stomach muscles. This will not only help you develop better balance, but it will also help you build a stronger core.

Proper Sitting Position

Wrong

Wrong



2. **Pelvic Tilt:** Lie on the floor or seated on the ball with your legs hip-width apart, your knees bent, both feet on the floor, and your arms at your side or extended outward with the palms down. Relax your head and shoulders. Squeeze your abdominal muscles & your buttocks. Remember to breathe. Press the small of your back into the floor or backwards if on the ball. Your pelvis will tilt into a neutral position

Start



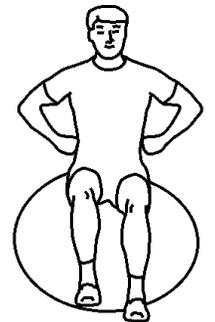
Finish



3. **Ball Circles** - Sit on the ball and place your hands on the ball for balance, on hips or place them behind your head (more difficult). Slowly begin to move your hips in a circle to the right and left keeping your abs tight. Start with small circles and as you get comfortable do larger circles.



4. **Seated Balance** - Sit on the ball with the spine straight and abs in. Place the hands on the ball, on hips or behind the head (harder) and lift the right foot off the floor slowly, holding it in the air for 5 or more seconds. Lower and repeat on the other side. Keep the abs in to help keep your balance. Balancing on 1 foot on the exercise ball is a challenge and its best to work your way up. Using this to become comfortable with squeezing the stomach to keep your balance and shifting weight will prepare you for the more advanced moves to come. Make sure that neither leg is leaning against the ball.



Sit on ball  
One foot on floor

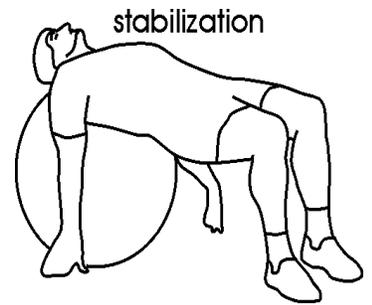
#### Ball Bridge

- Crouch down on your feet, press your shoulder blades against the exercise ball behind you and place your hands across your chest.

Without moving your feet, extend your back until it is parallel to the floor and lower it back after a short pause.



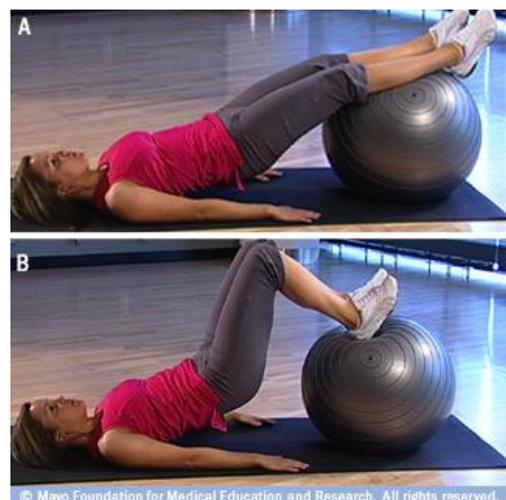
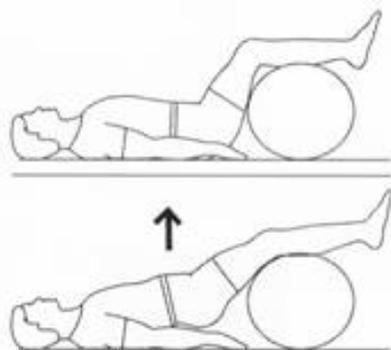
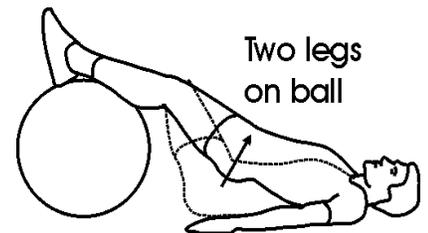
5b. **Ball walks** - Sit on the ball and place the hands on either side for balance. Contract the abs and slowly walk the feet forward as you slide the back down onto the ball. Continue walking the feet forward until you're in a bridge position with the head and shoulders supported by the ball, hips lifted. Walk all the way back until you're seated again and repeat. If this feels difficult, hold onto a wall for balance and only walk forward a bit at a time until you feel more comfortable.



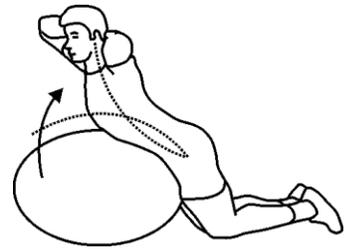
5c. **Supine Bridging:** Lay on back with ball between shoulder blades. First, raise buttocks off of ground until neck, back, and thighs are parallel. Slowly extend one knee then raise that leg until parallel to opposite thigh. Place hands on stomach as a reminder to tighten abdominal muscles. Repeat with other leg.



5. **Hip Extension** - Lie down with feet heels propped on ball. Keeping abs tight, slowly lift your hips off the floor (squeezing the glutes) until body is in a straight line. Hold for a few seconds and lower. For added intensity, put ball closer to the feet. For even more of a challenge pull the ball closer to your buttocks with your feet (B). Dig your heels into the ball for traction and to engage the muscles along the back of your thighs (hamstrings).

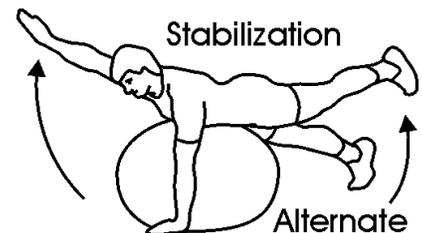


6. **Back Extension** - Lie face down with ball under your hips and lower torso. Place your hands behind your head or at your sides and stay on your knees or toes. Slowly roll down the ball and then roll back up, lifting your chest off the ball. Bring your shoulders up until your body is in a straight line without hyper-extending. For added mid-back strengthening start with arms straight in front of head then alternate to the sides making an “I” then a “T”. Squeezing the shoulder blades in each position.



7. **Ball Arm-Leg Extension - Alternating**

Lie prone on top of the exercise ball, your belly pressed against it and maintain balance with your feet and hands on the floor.



Extend your left arm and right leg out and up and lower them back after a short pause. Alternate sides after each repetition.

Breathe out while extending and breathe in while returning to starting position.

8. **Wall Squats:**

- Place an exercise ball between the wall and the curve of your lower back.
- Stand with your feet shoulder-width apart.
- Bend your knees and lower 5 to 10 inches, keeping your shoulders level and your hips square. Remember to aim for buttocks toward the wall. Hold this position for 3 seconds and then stand back up.



## **STRETCHES**

### **Prayer Stretch:**

This stretch is perfect for cooling down after a workout or maybe even at the end of a long day. Enjoy the stretch relax hold and breath.

- Start kneeling next to the ball.
- Extend your arms and place your hands on the ball.
- Sit back onto your heels.
- Let your arms fall to one side. Hold for 30 seconds and then return to the top and lean to the other side.



### **Pigeon Pose With The Ball:**

On your back place the left heel on the balance ball and the right foot on the outside of the left knee. Inhale deeply and on the exhale pull the left leg towards you, feeling the stretch in the right hip. Repeat ten times and switch sides.



Remember if anything hurts stop immediately and consult with your physician. All motions should be slow and controlled; if they are not, use extra support for stabilization until movement can be completed easily.