

CORE STABILITY

Your 'core' is a nature corset of muscles, wrapping around the spine and abdomen. The muscles include your back, shoulder girdle and pelvic girdle. These girdles act as anchors and allow the transfer of forces from the limbs to the spine. If the appropriate muscles are relatively weak the body will find a way to compensate. It does this by adjusting the body into positions that are not ideal, therefore losing efficiency, losing power and making you vulnerable to injuries such as low back pain. Strengthening these CORE muscles allows other muscles and joints to perform in the safest and most effective way.

It is the core muscles that are responsible for translating forces between the spine and limbs and they are therefore essential for optimal body functioning. Improving your core stability muscles will lead to:

- ✓ Improved posture
- ✓ More efficient use of muscles, as less effort lost in compensatory trunk movements
- ✓ Improved balance and coordination
- ✓ Increased ability to generate speed/change direction
- ✓ Decreased injury risk
- ✓ Improved performance in sport

This collection of exercises focuses on body alignment. These exercises should be performed slowly, focusing on quality and control. Begin with 5 repetitions and as you become better, build up to 10 quality repetitions. Start with a few exercises and as your stability improves, progress to the more advanced, holding for longer and increasing the repetitions.

N.B: If you have undergone lumbar spine surgery, only attempt these exercises after 6 weeks post op

Remember quality not quantity!
Try exercises in front of a mirror

1. SEATED ARM / LEG RAISE

Starting Position: i) Sit on ball with knees in line with your feet and spine in neutral position.

Action: ii) Slowly raise one arm or leg, tighten tummy muscles to control the movement.

Progression: iii) Try alternating arms/legs.
Try both arms raised together.
Try combined arm and opposite leg lift.

Common Errors: Sideways trunk movement.
Back arching.
Shoulder hitching.

i



ii



iii



2. AB EXPLORATION

Starting Position: Lying comfortably on your back, with your knees bent and the ball in your hands.

Action: i) Slowly move the ball a small distance over your head to the point where you feel your back needs to arch.

Progression: ii) Try moving the ball a little to the left then the right.
iii) Try diagonal movements, from shoulder to hip with the ball.

Common Errors: Back arching.
Moving ball too quickly.

ii



3. SUPERMAN

Starting Position: Lie over the ball on all fours. Stabilise the trunk by tightening your tummy. Make sure that your head and neck are in a straight line from the shoulders.

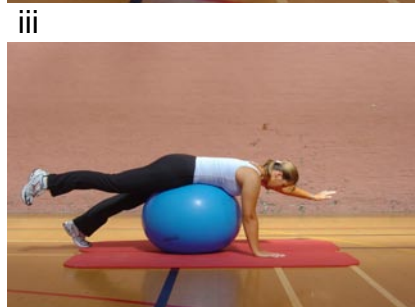
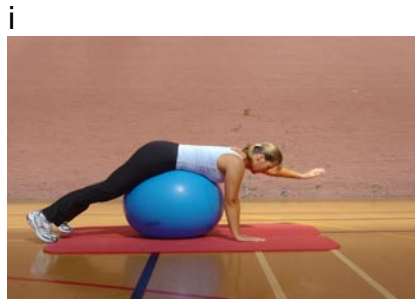
Action:

- i) Slowly raise one arm in front of you.
- ii) Slowly straighten one leg out behind you.

Progression:

- iii) Combine opposite arm and leg raise.
- iv) Extend one leg and the opposite arm, and then raise the second arm by your side.
- v) Lift both arms in front with one leg extended.
- vi) Lift both arms in front, extend one leg and rise onto tiptoes on the other leg.

Common Errors: Letting head sag down or tipping up.
Arching lower back.



v / vi



4. WALL SQUAT

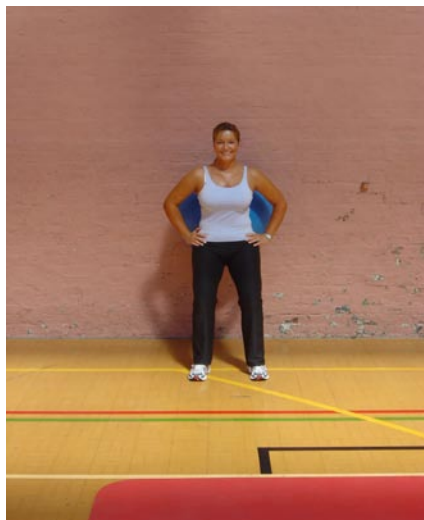
Starting Position: i) Stand with the ball at hip level behind your back against the wall. Feet shoulder width apart, stomach flattened, bottom squeezing.

Action: ii) Slowly roll down the wall; do not bend past 90 degrees at the knee. Hold the position for 10 seconds, return by rolling back up on the ball.

Progression: iii) Try single leg wall squat – keep hips level and knee in line with 2nd toe.

Common Errors: Overuse inner thighs and lower back.

i.



5. WALL PUSH UP

Starting Position: i) Standing with both hands on ball against wall at shoulder height. Find neutral posture, tighten tummy and relax shoulders.

Action: i) Slowly bend elbows and move the entire body towards the ball, then straighten the elbows and return to the starting position.

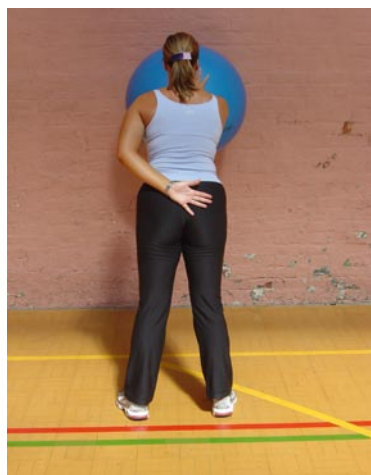
Progression: ii) Degree of difficulty is dictated by the distance of your feet from the ball.
Use the same starting position but with one hand placed behind small of back. Concentrate on keeping shoulder blades and hips parallel with the wall.

Common Errors: Not maintaining neutral spine position.
Poor scapula (shoulder blade) position and control.

i



ii



6. THE BRIDGE

Starting Position: i) Lie on your back with feet on the ball.

Action: Tighten 'gluts' and slowly peel your hips from the floor by pressing down on the ball.

Progression: ii) Raise arms above head/out to side.
iii) Place arms across chest – decreasing base of support.
iv) Raise one leg off the ball.

Common Errors: Back arching.
Neck muscles not relaxed.

i.



ii.



iv



7. OTT OVER THE TOP!

Starting Position: i) Kneeling behind the ball.

Action: ii) Push out over the ball and support yourself with your hands. Pull tummy up to your spine so that the lower back and hips are straight.

Progression: iii) Increase distance between hands and ball. Once balanced, roll the ball in a circle, first one direction, then the other.

Common Errors: Sideways trunk movement.
Back arching /sagging.

i.



ii.



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