

## EXERCISE DURING PREGNANCY

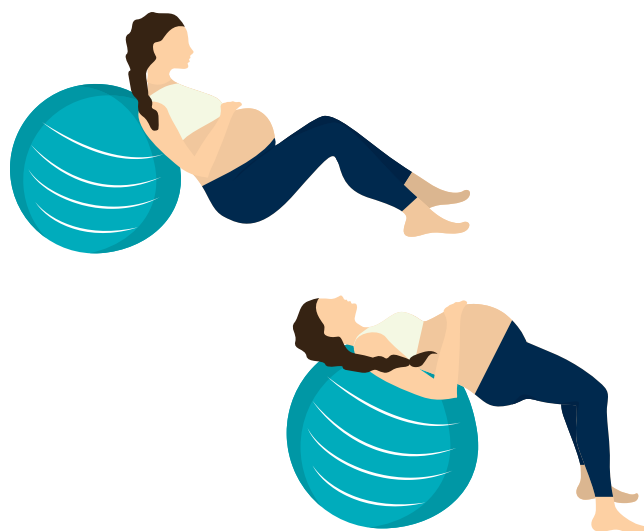
The fitball is an ideal tool for exercise during pregnancy because it provides support and mobility during a variety of exercises. It also gives trainers improved alternatives and modifications for many exercises that are inappropriate or dangerous for pregnant women. Fitballs are also popular for assisting active labour, so they are much more likely to be used as a tool in childbirth if women feel confident on the ball.

The following are some exercises suitable for women at any stage of pregnancy. When performing these exercises, as with most exercises, activating or bracing the abdomen is essential! This technique is subtle, so look out for signs of over-using your outer abdominals, raised shoulders, sucking in of your ribs, or holding your breath and adjust as necessary. A good cue is to sit tall with shoulder blades set back and down, and draw your lower belly towards your spine as though you are 'bear hugging' your baby and hold this brace while you breathe normally.

### BRIDGE

This will strengthen the glutes and thighs and is an excellent alternative to single leg work in four point kneeling or standing positions, both of which are likely to create sacroiliac pain. Be sure to avoid hypotension by lowering the pelvis with every repetition. Check that you and the ball is stable (e.g., floor boards or socks would be unsafe). Ensure your neck is in neutral, and your shoulders and upper back are well supported on the ball.

**To perform:** Place your head and shoulders on the ball, neck in the neutral position and feet on the floor with knees at 90°. Lower your hips towards the ground, then extend your hips and pelvic tilt to raise up to the horizontal position. Ensure your weight is in your heels and tighten your glutes to enhance the workout.





### UPPER BODY CONDITIONING

Any upper body exercise like bicep curls or deltoid raises has added benefit for pregnant women if they are seated on the fitball instead of standing or sitting on a bench. The fitball facilitates improved technique, posture and core stabilisation, incorporating abdominal stabilisation while performing upper body strength and conditioning.



Stabilisation assists back and pelvic stability, hence helping to prevent back pain and pelvic joint instability (two common pregnancy related problems)

**To perform:** Sit on the fitball, feet out in front. Sitting tall, brace your abdominals. Holding light weights, slowly bend and extend your elbows (or any upper body exercise you might normally do in your program).

Pregnant women who are seated for upper body strengthening are less likely to suffer from impaired venous return than if stationary standing. Ensure you use light weights to avoid excessive strain and holding your breath, which tends to stress the pelvic floor. Avoid tight grip of weights to prevent raised blood pressure.

### PELVIC TILT

This is a wonderful exercise to mobilise the spine, as well as to strengthen the glute (bottom) muscles and relieve the lower back.

**To perform:** Kneeling, lean forward over the ball with your back straight. Tilt the pelvis to tuck the buttocks in and under, as you round up your lower back.



### PELVIC FLOOR

It is inevitable that the pelvic floor is stretched and weakened during pregnancy. Our commitment as your health experts is to prevent extra strain on the muscles and encourage pelvic floor awareness and strength. Strengthening exercises should be performed in various positions throughout the day - the fitball is excellent for this. Strengthening the muscles of the pelvic floor will help prevent short and long term incontinence in the future.

**To perform:** Sit on the ball, leaning forward to rest on thighs. Focus on the muscles of your pelvic floor - a good way to think of it is as if you are stopping yourself going to the toilet. Raise these muscles slowly and hold the contraction for the count of ten. Repeat three times.

Ideally pregnant women will train their pelvic floor in various positions throughout the day but this position, on the ball, is excellent as it gives the feeling of the pelvic floor being close to the ball. This awareness of location assists in quality pelvic floor strengthening.

The pelvic floor benefits from cross training. Vary between slow, long contractions (functionally useful for endurance) and short strong contractions (important for times such as sneezing and laughing). Make sure you relax your shoulders and breathing during pelvic floor work and if possible, add simultaneous abdominal bracing to further enhance the exercise. Do not confuse these with pelvic tilts - there should be no visible movement during pelvic floor exercises.

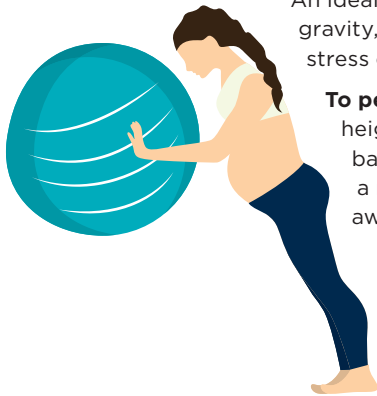




### WALL PUSH UP

An ideal push up choice that works across gravity, rather than against it, creating less stress on the lower back.

**To perform:** Position the fitball at chest height with your hands around the ball at shoulder height. Feet about a metre away from the wall (further away increases intensity). Brace your abdominals and set your shoulders back and down. Now perform a push up towards the wall, keeping your back and the ball stable.



This style of push up facilitates excellent spinal and shoulder stabilisation, which is of high importance during pregnancy. Special considerations: abdominal bracing is vital to prevent loss of neutral spine into lumbar lordosis. Inappropriate for women with carpal tunnel syndrome, as is any exercise that leans through the wrist.

### PIRIFORMIS STRETCH

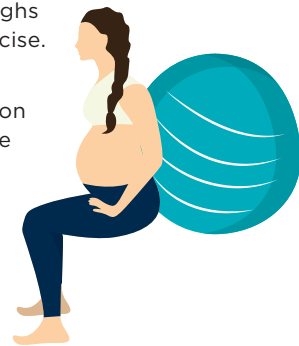
**To perform:** Sit on the fitball with one foot crossed over the other thigh. Lean forward as you roll the ball backwards until you feel the stretch behind your hip. This is a specific stretch to avoid or assist the common problem of sacroiliac pain (pain in the lower back/legs). You may need to be near something stable to hold onto, or at least rest your hands on the ball for balance.



### WALL SQUAT

There is no better way to strengthen the thighs and prepare for active labour than this exercise.

**To perform:** The widest part of the ball is between the lower back and the wall. Position feet a long way out from the wall and ensure back is perfectly vertical. Avoid leaning forward or backward. Maintaining a horizontal spine, sit down and push back up. Keep the weight in the heels and use abdominal bracing to push the ball into the wall.



This is a good alternative to a squat as it allows excellent training without straining the back or pelvic joints. Strong quadriceps are also important as they assist lifting, thus decrease strain on the back.

Ensure abdominal bracing, upright posture and correct knee alignment. Keep the squat bilateral (both legs at the same time), as single leg weight bearing can overload the sacroiliac joints.

Abdominal bracing can, and should be, practiced in different positions but this one is particularly effective as the baby's weight is taken off the back, while providing excellent resistance to the abdominal work.

**To perform abdominal bracing,** kneel while resting arms and upper body on the ball. Back horizontal. Draw your belly towards your spine to 'bear hug' your baby. Keep your back straight and still. Hold the brace for 10 counts, while breathing normally. Repeat three times.

This is an ideal position for abdominal work as it is safe, appropriate and takes the weight of the baby off the lower back. Resistance is provided by gravity and the weight of the uterus and baby so it increases as the pregnancy progress

