



SWISS balls

— the use and benefits

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The use of the swiss ball is rapidly becoming popular for pregnant women and is widely utilised in clinics, studios and hospitals worldwide. Many women, especially in the later stages of pregnancy, find the swiss ball more comfortable than a chair to sit on as it allows the pelvis to be level or slightly higher than the knees. This position creates better posture, leaving more room for baby to move resulting in less discomfort for the mother.

Exercise before the birth is important if the mother is to stay strong and healthy. However, this has to be kept very basic due to mum's altered shape inhibiting movement, and also to ensure no added strain is placed on the abdominal muscle. Post-birth pelvic muscle requires strengthening and the swiss ball is a great tool for improving the pelvic floor muscles. Before commencing exercise, women should seek medical advice from their doctor or midwife to ensure that the ball and exercises are suitable for them.

Swiss balls can also be used as an alternative support in the delivery

room. During the birth, the ball can provide support in kneeling or squatting positions and can enable easier movement for the mother to shift for easing discomfort. Discuss this with your midwife to identify suitability for you.

SITTING



Sitting with pelvis slightly higher than knees, back as straight as possible (sit up tall), feet flat on floor and feet approximately shoulder width apart. During the end stages of pregnancy women's posture can impact on the baby's positioning for birth. Ensuring the pelvis is slightly higher than the knees will assist with creating opportunity for baby's head to engage in the optimal position.

As babies do not all ways lie in a position comfortable for the mother, encouragement for a shift of position either for mother and/or baby to achieve a happy compromise can be encouraged by gently rotating and tilting the pelvis.

KNEELING



Kneel on the ground with the ball in front of you. Lean forward to rest your upper body on the ball in a position that is comfortable.

Kneeling or leaning over the ball can be a very comfortable position for most pregnant women. Many babies lie in a posterior position (their back to their mother's back). This is heavy work for the mother, often causing lower back pain and general fatigue. Leaning on the ball

in the kneeling position is not only a comfortable option for the mother but can also assist with turning the baby to a better position for birthing. This can also be a comfortable position during labour. You can make things more comfortable by kneeling on a pillow, draping a towel over the ball, or placing a cushion/pillow between your heels and your bottom.

PELVIC ROTATION



Start in the sitting position, then gently rotate your pelvis in a circular motion – ensuring that you rotate both anti-clockwise and clockwise.

Rotating your pelvis gently while sitting on the ball will help keep the pelvis and lower back mobile and help maintain strength in the legs as they assist the movement and balance. Remember to keep your feet flat on the floor to ensure stability – placing your hands by your sides will also help.

PELVIC TILTS



Start in the sitting position. You

can allow your arms to rest by your side. Use your pelvis to gently rock the ball from one side to the other. Try to keep your shoulders level with the ground and sit tall throughout the exercise. Feet stay flat on floor.

This is good for keeping lower back muscles mobile and strengthening core muscles important for birth.

SIDE FLEXION



Start in sitting position. Relax arms down by your side. Reach down by the side of the ball, hold for a few seconds before returning to start position. Repeat several times each side. Avoid flopping forward or arching backwards. Only reach down to where you are comfortable. This will help avoid forward or backward spine positioning.

This exercise mobilises and strengthens the sacrospinalis muscle. This muscle runs the full length of the spine from the base of the skull to the pelvis and attaches to each vertebra and at various points to the ribs. It enables backward bending (extension), sideways bending (lateral flexion) and twisting (rotation) of the spine.

Weakness of the muscle often results in muscles on one side of the spine being tighter than the other – experienced as unbalanced posture and back pain.

TOE TOUCHES



Start in sitting position then straighten one leg out (keeping heel on the floor). Slowly reach towards your toes, keeping the ball as still as possible. Repeat this several times holding each stretch for a few seconds before returning to the start position. Ensure you do both legs. Alternatively, you can reach forward between your legs.

This may appear to be a simple exercise, however many different muscle groups are being incorporated in the pelvis, legs and spine. The deeper muscles of the spine are working to ensure stability of the ball; they are being strengthened during this exercise and will be beneficial for posture.

LATERAL EXTENSION



Start in the sitting position. Keeping your pelvis level, raise one arm up and extend it over your head then gently continue the reach and allow

your spine to flex to the side a little only. Hold before returning to start position. Repeat several times each side.

Apart from stretching the larger sacrospinalis muscle (mentioned in lateral flexion), this stretches muscle groups that flex the spine laterally, assists the diaphragm to expand thereby increasing efficiency of breathing, aides with spinal mobility thus reducing back pain.

PELVIC RAISES



Start lying on your back with your lower legs resting on top of the ball approximately shoulder width apart. Relax your arms by your side – this will increase stability.

Slowly raise your pelvis about 10cm off the ground, by pressing down through your lower legs into the ball and tightening your gluteal muscle (buttocks). Hold this position for a few second then gently lower back to the start position. Repeat several times.

This exercise works the gluteal muscles (buttocks), hamstrings

(back of thigh), quadriceps (thigh) in a light strengthening action. The pelvic stabilisers are also activated during this exercise making it an ideal way to strengthen pelvic muscles for birthing.

KNEE FLEXION



Start lying on your back with your heels resting on the ball so that your legs are straight. Relax arms by side as once again they will act as stabilisers.

Move the ball towards your buttocks by pressing down with your heels and flexing your hamstrings (back of thighs) your knees will bend during this. Hold then relax back to start position. Repeat several times. Try hard not to allow the ball to 'wobble'. This exercise enables strengthening of hamstrings while in a safe and stable position. It also will assist with strengthening hip flexors (muscles attached at

the front of the pelvis and thigh – lift upper leg up, eg to step up a step). Hip flexors are also important stabilisers of the pelvis.

LEG STRENGTHENING



There are several options, each requiring the ball to be against a wall or stable surface. Hold the push for several seconds before relaxing to start position. Repeat 3-4 times. N.B. There should be no abdominal strain!

1. Lying on your back, place your feet at shoulder width apart on the side of the ball. Shuffle your bottom towards the ball so your knees are bent. Relax arms by side. Push feet into the ball.
2. As for above but instead of remaining in lying position, raise up on to hands.
3. Sitting on a chair (ensure it won't tip backwards when you push into the ball).

This exercise will help strengthen the quadriceps muscles (thighs) and is a good gym alternative as it can be a lot more comfortable as your abdominal region changes shape with baby's growth and changing positions.

These are only a few of the exercises that can be done with a swiss ball, I have selected them for their more specific benefits for 'mums to be'. For most people these exercise can be completed with a 65cm swiss ball. Remember, seek medical advice if you are unsure whether or not this is for you!

Keep your comments coming in to mike@befit.co.nz