

# Back and Ball

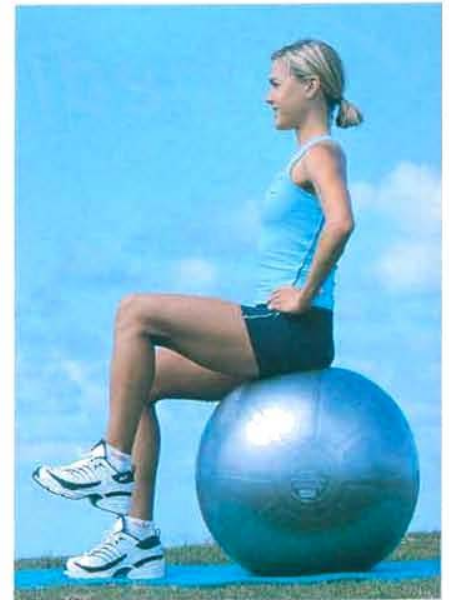
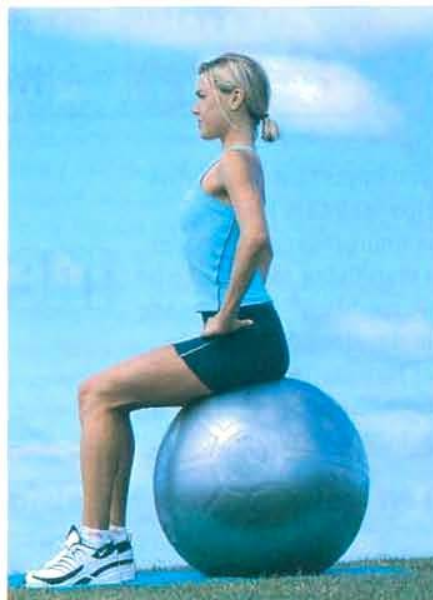
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**It is estimated that 8 out of 10 Australians will experience lower back pain at some stage during their lifetime. However, the use of a Swiss Ball as an exercise tool can play a role in the prevention, management and recovery of this debilitating complaint.**

**T**HE FOLLOWING WORKOUT IS focused on training the back's three stabilisation systems: segmental (deep muscles around the spine), anterior (muscles at the front of the body) and posterior (muscles at the back of the body). By training these systems, we are looking to strategically stabilise and strengthen the back.

It is recommended that you warm up prior to every workout. Please note that form is more important than repetition, and that, once you lose your form, you should stop and rest. Under each exercise there is a description of the exercise, plus the exercise variables:

- Repetitions – how many times you repeat it.
- Sets – how many groups of repetitions you do
- Rest – how long you rest between each set of exercises
- Purpose – why you are doing the exercise. Repetitions, sets and rest are recommendations only, and may be changed to suit the workout needs of the individual.



## Seated posture with single leg lift

**Starting position:** sit on the ball, your hip should be level with, or slightly above your knee, with your thigh and lower leg perpendicular to each other, and your knee should be in line with your 1st and 2nd toe.

**Method:** now, lift up through your chest and maintain the natural lordotic curve in your low back, draw your belly button towards your spine, and tuck your chin – your hip, shoulder and ear should now line up in a straight line when looking from the side – and place your hands on your hips or by your side. Being in this position may be challenging in itself, but now, whilst in this position, lift one leg slightly off the ground and hold for 2 seconds. Lower, then lift the other and repeat. As you lift the leg you will notice an increase in movement through the core of your body.

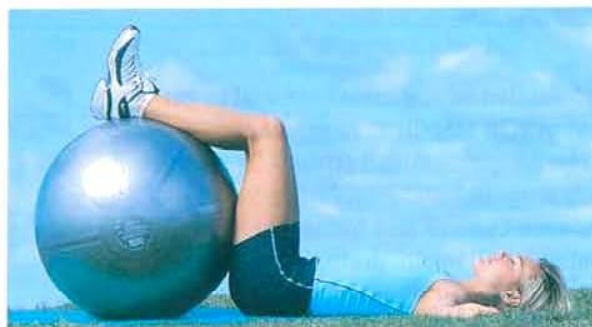
You may even be experiencing some difficulty doing the exercise at first. Just be patient and work on controlling the movement.

**Repetitions:** 20 each side

**Sets:** 2-3

**Rest:** 60 seconds

**Purpose:** develop postural endurance, activate segmental and anterior stabilisation.



## Supine feet on ball single leg lowering

**Starting position:** lie down on your back, place both legs on the Swiss Ball, and keep your legs close to your body (to begin with). Relax your head and neck.

**Method:** take one hand and place it under your spine in line with your belly button, so you can feel the bony bumps on your spine. Take a deep belly breath. As you exhale, tilt your pelvis back (this activates your lower abdominals), and you should feel a slight increase of pressure on your hand. Now, draw your belly button towards your spine. Whilst maintaining this position and breathing, lower one leg to the ground and then back onto the ball. Do the same on the other side. The trick to this exercise is to maintain the pressure on your hand as your leg lowers and moves back onto the ball. To make the exercise harder, move the ball further away from you and straighten your leg more.

**Repetitions:** 20 each side

**Sets:** 2-3

**Rest:** 60 seconds

**Purpose:** co-ordinate and strengthen the lower abdominal wall, develop segmental and anterior stabilisation.

### Prone forward ball roll

**Starting position:** kneel, and place the Swiss Ball in front of you. Interlock your hands and place your forearms on the apex of the ball. If you take a look at the top picture, you will see that Neroli has her arm at approximately 90° to her trunk – the same as the thigh

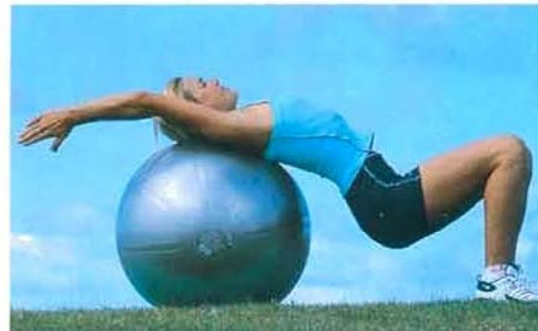
**Method:** as you roll the ball forward, your shoulder and hip move together in an integrated movement, and you will get to a point where you begin to feel loading through your abdominal wall. Note that you need to control your back position in this movement. Do not hunch your shoulders or mid back, and do not allow your lower back to sag. When you have rolled forward far enough, hold for 2 seconds, and then return to the start position. Make sure your tongue is on the roof of your mouth, chin tucked, and belly button drawn towards your spine ... just like you are trying to put on a pair of jeans which are too small around the waist.

**Repetitions:** 6-8.

**Sets:** 2

**Rest:** 60 seconds

**Purpose:** activate anterior and segmental stabilisation, strengthen latissimus dorsi which is part of your posterior stabilisation system.



### Supine hip extension & pull over feet on floor

**Starting position:** position yourself with the top of your back on the ball, and your head resting on the ball. Lift your pelvis into the air, so that your thighs and lower legs are perpendicular to each other – in effect, forming a bridge or a table top. Now, take your arms straight up in front of your chest and grasp your hands above your head.

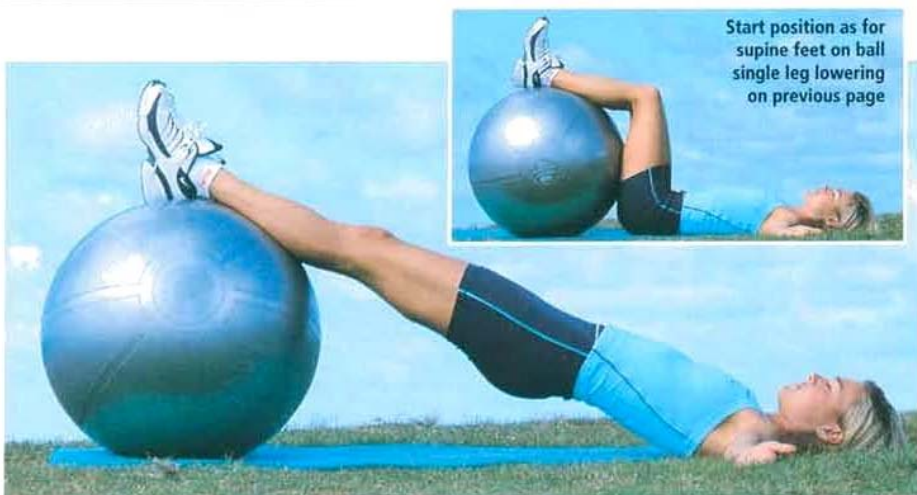
**Method:** drop your pelvis to the ground, but do not roll on the ball and do not allow your knees to drop in toward the centre. To counterbalance this movement, take your arms over and behind your head. Now return to the start position. If you wanted to make the exercise more challenging you could use a weight in your hands.

**Repetitions:** 8 to 12

**Sets:** 2

**Rest:** 60 seconds

**Purpose:** activate posterior and anterior stabilisation systems.



Start position as for supine feet on ball single leg lowering on previous page

### Supine hip extension feet on ball

**Starting position:** lie on your back, placing your calves on the ball, and your arms outstretched at 90° to your body, palms up. Relax your head and neck. Your feet should be in line with the knee and hip (don't let them roll out).

**Method:** lift your pelvis into the air so it lines up with your ankles and shoulders. Squeeze your hamstrings and gluteals (buttocks) for 3 seconds and then lower. Do not allow your bottom to touch the ground. If you are finding the exercise too difficult, then lower to the ground and have a 2-second rest, then repeat. Remember to pull your belly button towards your spine, and force your tongue onto the roof of your mouth.

**Repetitions:** 8 to 15

**Sets:** 2

**Rest:** 60 seconds.

### Tips for using the Swiss Ball

Prior to commencing all of the exercises, here are some quick tips.

- During the exercise, place your tongue on the roof of your mouth – just swallow and your tongue automatically goes there. This activates the muscles at the front of your neck and stabilises and strengthens your neck during the exercise.
- Keep your chin tucked, making a double chin. This again helps to activate the muscles at the front of your neck, and also keeps the head in good alignment with the body.
- Be conscious of drawing your belly button in toward your spine when exercising. This action activates the transverse abdominis, which is a major stabilising muscle of your back.
- Postural awareness is important at all times. Exercising with poor posture can be damaging to your physical health over a period of time. Seek advice if you feel your posture could improve prior to continuing your exercise routine.
- Make sure your head and neck are relaxed during your exercise. Maintain postural alignment, and be aware of not creating too much pressure through the head and neck region.
- Size your Swiss Ball correctly. When you sit on the ball, your hip should be either parallel or slightly above your knee (see seated posture exercise).