

# **WORKPLACE WORKOUT**

## Having a Ball at the Office

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The productivity and income lost due to back pain runs into billions. of dollars globally each year. If we all simply switched our office chairs for a Swiss ball, the chances are, this waste of time and money could be drastically reduced.

A Swiss ball provides a moving surface on which to sit, thereby influencing and stimulating a number of neuromuscular responses. One of the key muscle responses is the activation of muscles that stabilise the spine. This is referred to as segmental spinal stability. Recent research from Queensland University suggests the inability of the spine to segmentally stabilise itself, le. remain steady, is a major contributor to back pain, and that decreased spinal stability may be perpetuated by non-moving surfaces, such as an office chair. regardless of its cost or ergonomic rating.

Sitting on a chair in the workplace environment contributes to:

- A reduction in muscle activity around the spine.
- Muscles and joints becoming fixed in poor postural positions.
- Holding the pelvis in a fixed position, thus decreasing movement and function.

These three factors alone can contribute to both acute

However, by sitting on a Swiss ball at work, this trend can be reversed by:

- Increasing muscle activity around the spine, thus aiding egmental spinal stability.
- Promoting good posture and allowing muscles and joints to move.
- Activating stabilising muscles around the pelvis through

The following workout can be carried out at any point during the day, and should take no longer than 10 minutes, all up. If you can, try to weave these exercises into your daily office routine. And, if you find yourself with a spare couple of minutes, just do one or two of the exercises. Every little helps, and your back will thank you for it come the weekend.

These exercises specifically target the promotion of spinal stabilisation, postural awareness and joint range of motion through strength ening and stretching exercises on the ball from a seated position This quick and convenient routine will assist you to maintain a

#### Exercise 1 - Seated Posture

Position yourself so that you are sitting on top of the ball. Your hips should be above your knees. Lift through your body as though standing at attention, tuck your chin by gently nodding. Viewing your body from the side, your hip, shoulder and ear should be in line. Place your hands

on your knees. Whilst in this position draw your belly button towards your spine - as though you're pulling on a pair of jeans which don't quite fit! This movement activates your transverse abdominis muscle, which is a major stabiliser of your spine.

Hold: 60sec

Purpose: To strengthen postural muscles involved in sitting, whilst maintaining good posture



#### Exercise 2 - Reach for the Ceiling

- From your seated posture position, take your hands above your head, interlock your fingers and reach for the ceiling.
- Hold: 30-60sec
- Purpose: To stretch muscles of the forearm, shoulder and back.



Exercise 3 -Shoulder Blade Squeeze

From your seated posture position, roll your shoulders back and rotate your hands so your palms face the ceiling. Gently squeeze between your shoulder blades and hold your position. Maintain your head position with your chin tucked.

Hold: 30sec

Purpose: To strengthen the postural muscles that maintain head and shoulder position.



#### Exercise 4 - Back Stretch

From seated posture position, roll the ball backwards, maintain foot position and allow your torso to gently move forward as you position your hands on your feet. Relax your shoulders and head, and allow your chest to rest on your legs.

■ Hold: 30-60sec

Purpose: To stretch the long muscles of the back



#### Shoulder Stretch

- From seated posture position, take your right hand and place it between your shoulder blades. Take your left hand and grasp your right elbow, gently pulling the elbow towards your head.
- Hold: 30sec. Repeat other side

Purpose: To stretch the upper arm and shoulder



#### Exercise 8 - Side Bend Stretch

Stretch

From seated posture posi-

tion, place your hands at

the centre of your back

and gently extend back,

maintain a comfortable

range of motion. Gently

look towards the ceiling as

you extend your back. If at

any time you feel dizzy or

nauseous, return your head

to the neutral position.

Hold: 30sec

- From seated posture position, take your left arm above your head and gently lean in the same direction, maintaining your seated position.
- Hold: 30sec. Repeat other side
- Purpose: Stretch side of the back

### Exercise 10 - Hamstring Stretch From seated posture position

straighten your left leg, place your heel on the floor and draw your toes towards your chest. Initiate a forward torso movement form your pelvis and maintain upper body posture. Move forward until you feel a stretch through the back of your thigh.

Hold: 30sec. Repeat other side

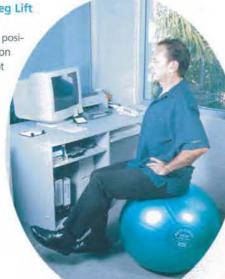
Purpose: To stretch the back of the thigh



From seated posture position, place your hands on your hips. Maintain foot width position and lift your left foot and hold for 5 seconds then return it to the floor and repeat on the other side. Maintain your posture at all times.

Repeat: 10 lifts each side

Purpose: Strengthen muscles that stabilise spine and pelvis



#### Exercise 9 - Groin Stretch

From seated posture position, roll forward and to the right. Place your hands on your knees and straighten your left leg. Draw your toes on your left leg towards your chest. The further you roll to the right and straighten the left leg, the greater

■ Hold: 30sec. Repeat other side

the stretch.

Purpose: To stretch the muscles on the inside of the thigh



Reference: Richardson, C., Jull, G., Hodges, P. and Hides, J. (1999) Therapeutic Exercise for Spinal Segmental Stabilisation in Low Back Pain, Scientific Basis and Clinical Approach. Churchill Livingstone: Sydney.



