The pelvic floor and core exercises

The pelvic floor muscles as part of the ‘core’

Muscles play a key role during exercise, but did you know that there are a hidden group of muscles called ‘pelvic floor muscles’ which need special attention?

Pelvic floor muscles form the base of the group of muscles commonly called the ‘core’. These muscles work with the deep abdominal (tummy) and back muscles and the diaphragm (breathing muscle) to support the spine and control the pressure inside the abdomen. The pelvic floor muscles play an important role in bladder and bowel control, supporting the pelvic organs and sexual function in both men and women.

During exercise, the internal pressure in the abdomen changes. For example; when lifting a weight - the internal pressure increases, when the weight is put down – the internal pressure returns to normal.

In the ideal situation the regulation of pressure within the abdomen happens automatically. For example, when lifting a weight, the muscles of the ‘core’ work together well- the pelvic floor muscles lift, the abdominal and back muscles draw in to support the spine, and breathing is easy. In this scenario, the pelvic floor muscles respond appropriately to the increase in abdominal pressure. If any of the muscles of the ‘core’, including the pelvic floor, are weakened or damaged, this coordinated automatic action may be altered. In this situation, during exercises that increase the internal abdominal pressure, there is potential to overload the pelvic floor causing depression.

When this happens many times during each exercise session, over time this may place strain down on the pelvic organs and this may result in loss of bladder or bowel control, or pelvic organ prolapse. If a problem already exists, then pelvic floor symptoms can potentially be worsened.

Pelvic floor muscles need to be flexible to work as part of the ‘core’, which means that they need to be able to relax as well as lift and hold. It is common for people to brace their ‘core’ muscles constantly during exercise in the belief they are supporting the spine, but constant bracing can lead to the muscles becoming excessively tight and stiff.

Pelvic floor muscle stiffness commonly coexists with muscle weakness and can contribute to problems such as urinary urgency and leakage. Other problems often associated with the pelvic floor muscles being too tight include pelvic pain, pain with intercourse and difficulty emptying the bladder.
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Are you at risk of pelvic floor problems?

You are at highest risk of pelvic floor problems if you are in one or more of the groups below.

- pregnant and postnatal women
- women who have had a baby
- menopausal and post menopausal women
- women who have had gynaecological surgery (e.g. hysterectomy)
- men who have had surgery for prostate cancer, and
- elite athletes (e.g. runners, gymnasts, trampolinists).

Your risk is increased if you tick one or more of the following.

- you regularly lift heavy weights (e.g. at the gym, or as part of your job)
- you strain often to empty your bowels (constipation)
- you have a chronic cough or sneeze
- you are overweight or have a Body Mass Index that is over 25
- you have had trauma to the pelvis area (e.g. a fall, pelvic radiotherapy)
- you have a history of back pain

If you are in one of the ‘at risk’ groups above or if you have symptoms of pelvic floor problems (see ‘How do I know if I have a pelvic floor problem?’) then it is important your exercise program is pelvic floor safe. Protecting your pelvic floor now will save you problems in the future.

Core exercises and the pelvic floor

Your abdominal muscle strength may exceed the ability of your pelvic floor. If you have or are at risk of pelvic floor problems, then it is important you train for the ‘weakest link’ and put your pelvic floor first. There are a number of ways to modify your core exercises to protect your pelvic floor:

- Cease strong abdominal exercises. See below for “core exercises to avoid”
- Reduce the level of your abdominal muscle exercise program. See below for suggestions of pelvic floor safe ‘core’ exercises
- Avoid breath-holding by exhaling with effort
- Maintain good posture
- Lift your pelvic floor first and hold it during the exercise, then relax afterwards
- Notice how many repetitions you can do before your pelvic floor muscles tire. You may need to add some rests, or reduce the number of repetitions you do in a row, while your pelvic floor muscle fitness improves.

If you are pregnant, early postnatal, post gynaecology surgery or post prostate surgery there are also more gentle abdominal exercises that are recommended during these phases. Seek advice from a Continence and Women’s Health Physiotherapist or your Exercise Professional to check which of the pelvic floor safe exercises are best for you. It is important to build up your pelvic floor muscle control first and then you will be able to progress to doing some more challenging abdominal exercises again. For information on PFM exercises visit www.pelvicfloorfirst.org.au.
The pelvic floor and core exercises

<table>
<thead>
<tr>
<th>Pelvic floor safe core exercises</th>
<th>Core exercises to avoid</th>
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<tbody>
<tr>
<td>Lower intensity abdominal challenge</td>
<td>High intensity abdominal exercises</td>
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<tr>
<td>• Single leg extension with one leg supported by a hand on stationary knee or moving foot on ball</td>
<td>• sit ups, curl ups, crunches</td>
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<tr>
<td>• Knees side to side with feet on ball</td>
<td>• abdominal exercises with medicine ball</td>
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<tr>
<td>• Modified plank on hands or knees with a slight bend at the hips</td>
<td>• V-sit</td>
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<td>• wall push ups</td>
<td>• hundreds</td>
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<td>• ball bridge (feet on ball or back on ball, +/- single leg lift)</td>
<td>• Double leg lowers</td>
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<td>• arm and leg lift on all fours</td>
<td>• plank position on hands and feet (eg ‘hovers’, full push ups)</td>
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<td>• leg lift sitting on the ball</td>
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<td>• shoulder rotations with back on the ball</td>
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<td>• standing balance work on the bosu or balance disc</td>
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Please note: whilst these exercises are pelvic floor safe, you will also need to consider the number of repetitions, abdominal challenge, number of sets, length of rest and your fatigue level - which also affects your pelvic floor function.

But how do I get flat abs?

If you’re aiming for a flat tummy then sit ups and crunches aren’t the best option. They will tone the ‘six pack’ muscles but will not flatten the tummy. Excessive upper abdominal tension that can occur with lots of sit-ups will often make the lower abdomen appear as a ‘pot belly’. Low-impact aerobic exercise to help lose extra abdominal fat is important. Pelvic floor exercises, when done correctly with relaxed upper abdominals and normal lower abdominal co-contraction, will also help to achieve flatter abs.
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How do I know if I have a pelvic floor problem?

Common signs and symptoms of a problem with your pelvic floor include:

- accidentally leaking urine when you exercise, laugh, cough or sneeze
- needing to get to the toilet in a hurry or not making it there in time
- the need to frequently go to the toilet
- finding it difficult to empty your bladder or bowel
- accidental loss of faeces or wind
- a prolapse
  - in women, this may be felt as bulging into the vagina, heaviness or discomfort, or a feeling of pulling, dragging or dropping down
  - in men, this may be noticed as a bulging coming out of the rectum, a feeling of needing to use your bowels but not needing to go
- pelvic pain
- pain during sexual intercourse, and
- poor sensation or loss of bladder control during sexual intercourse.

Where to get help

Pelvic floor problems are not a life sentence, as they can be treated and in many cases cured, however not all bladder or bowel control problems are the result of poor pelvic floor muscle fitness. It is important to see a GP or continence professional if you suffer from any of problems described above and they can determine the best course of action to get you back in control.

For further information about the pelvic floor or to locate your nearest continence health professional contact the National Continence Helpline on freecall 1800 33 00 66 or visit www.continence.org.au.

Visit www.pelvicfloorfirst.org.au for more information on putting your pelvic floor first.