





## Fact sheet Pregnancy and post natal abdominal muscle bracing

Learning to 'brace' or actively contract (ie. gently and accurately tightening) your stomach muscles is important during pregnancy. 'Bracing' will help you keep your muscles toned so they can support your baby and reduce the strain on your back. Strengthening your muscles during pregnancy will make it easier for you to regain your muscle strength and tone after your baby is born.

While you are pregnant it is not suitable for you to continue with traditional abdominal exercises, such as sit-ups and curl-ups. Many of these exercises mainly work the outer abdominal muscles.

'Bracing' involves contracting your deeper abdominal muscles by gently drawing in the abdominal muscles below your belly button, in towards your spine and up slightly, holding this position for as long as you comfortably can. Many women do not 'brace' correctly, so it's a good idea to check your technique against the following tips.

- You should not try too hard. If you need to hold your breath then stop.
- You should feel the lower half of your abdominal muscles mainly work, below the belly button
- You should not feel that you are sucking the muscles in up under your ribcage, otherwise you are mainly working your upper abdominal muscles.
- You should feel no pressure downwards on your pelvic floor muscles.
- You may feel your pelvic floor muscles drawing up slightly and this is fine.
- Some women find it easier to start by drawing in the pelvic floor muscles first and then their lower abdominal muscles.
- You should feel no pain or discomfort while doing this.
- If you are still unsure get your technique checked before doing this as an exercise!

As your baby grows your stomach muscles need to hold and support extra weight. The lower abdominal muscles especially need more attention as your baby begins to show. To focus more on the lower muscles, place your hand on your abdomen, below your belly-button. Gently pull your stomach muscles away from your hand. If this stops or changes your breathing, you are trying too hard. Stop and start again more gently so you can hold your muscles in while you keep breathing.

Positions for learning the exercises include sitting, standing, lying on your side and being on hands and knees. Later in pregnancy many women find that the hands and knees position allows them to feel the muscles working more easily.

Once the technique of 'bracing' is learned, these exercises can be done easily in any position and during daily activities. This means you can do it many times a day without setting time aside to exercise.

Once you are able to brace or actively contract the muscles for 3–4 seconds aim for 3–4 repeats. Increase to 5 second holds, repeated 5 times, then build up to 10 seconds, repeated 10 times.

Once you have built up to this level, you can increase your hold time – bracing for as long as comfortable during daily activities such as standing in a queue, doing the dishes, getting up from a chair or lounge, rolling over in bed, walking, pushing a shopping trolley and lifting.

## **Postnatal bracing**

Start with drawing the muscles in as soon as you are comfortable, within the first few days after the birth. Ensure that you focus on the lower half of your abdominal muscles as outlined for pregnancy abdominal bracing. Some women find this is easy to do, and are able to draw up their pelvic floor muscles up at the same time. Others find that the really need to stop and concentrate on abdominal bracing and pelvic floor muscle exercises separately. Use the method that works for you best, and seek the advice of the physiotherapist who visits you on the maternity ward, or your midwife to check your

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technique for you. Women who have had a caesarian section can gently draw the muscles in for support when they move, and start using bracing as an exercise within 4–5 days after the birth. See the fact sheet What is safe to do after a caesarian section? for more information.

Initially it may be easier to do the abdominal bracing exercises while

you are lying on your side, while sitting (including when you are holding your baby), and when standing. Later as it becomes easier to brace your abdominal muscles you can draw them in while walking and pushing the pram, changing the baby, hanging out the washing, lifting your baby or when grocery shopping.

Again you should not feel any discomfort while doing this. If you do seek advice from your doctor or health professional.

Bracing your abdominal muscles as an exercise can be progressed and made harder steadily as you improve. First focus on holding your muscles in during daily activities and also building up your hold time to at least 10 seconds at a time. When you can do the basic brace holding for 10 seconds and repeating easily 10 times in one session, you are ready to progress your exercises.

This will help to continue to tone your abdominal muscles and to improve muscle control and strength around the pelvis and spine.

One exercise which places minimal strain on your back is as follows. Sitting on a chair, brace your abdominal and pelvic floor muscles and slowly lift one leg (not too high). Try not to move your hips or body, and be sure that you feel no downwards strain on your pelvic floor. Breathe normally as you do this, and then lower. Build up to 10 repetitions on each side, making sure that you do each one well.

There are many progressions of post natal abdominal muscle exercises, so choose wisely the program that you will follow.

By progressing too quickly or missing out on the correct stages of progression, you may be left with an underlying weakness in the deeper abdominal muscles and hence less lower back support during exercise.

Progressing too quickly or doing the wrong exercises can also place downwards strain on your pelvic floor muscles.

During any abdominal muscle exercise you should feel that you have control over holding and maintaining your abdominal brace throughout the whole exercise. If you feel any strain on your back, pelvic floor or abdominal area, then the exercise is too hard for you at that stage.

Abdominal muscle exercises should not cause a bulging of your abdominal wall while you are doing them; otherwise the exercise is not effective for toning and strengthening your abdominal muscles and may even be placing strain on them.

Returning to your normal shape after the birth may take time and effort. Your stomach muscles have been stretched for months during pregnancy. Weak abdominal muscles can contribute to the development of back pain. Weakened abdominal muscles, combined with returning to sport or your usual exercise program too early, can increase your risk of developing back or pelvic pain.

Imagine the difficulty you would have in caring for your newborn baby with a back injury! It is worth taking the time to learn how to prevent back and pelvic pain after your pregnancy.

Strong abdominal muscles support your back.



Courtesy of The Pregnancy Centre.