

## The Prenatal body

As your body undergoes phenomenal physical change during pregnancy, you may encounter unexpected aches, pains, discomfort and leaks.

Certain musculoskeletal problems, commonly associated with pregnancy, are listed below.

- 45% of women\* complain of pain in the lower back or pelvis, likely caused by:
  - Compromised pelvic joint stability as ligaments relax in preparation for birth; or
  - Strain on the pelvic and lower back joints or ligaments if the body adopts a poor postural alignment to accommodate a growing 'bump'; or
  - A weakened core-muscle stabilising system of the lower back and pelvis as pregnancy progresses.
- Diastasis or separation of the Pubic Symphysis affects a much smaller percentage of pregnant women. It is often characterised by severe pubic pain.
- Urinary incontinence affects 46% of pregnant women\*\* and is related to inadequate function of the pelvic floor muscles.
- Carpal Tunnel Syndrome which causes tingling, burning and numbness in the fingers and hand or arm is a commonly reported problem, although the reason for its prevalence during pregnancy is not clear.

***If you experience one or more of these problems, consider a physiotherapy consultation. Physiotherapy can assist in the effective management of pain or dysfunction.***

Physiotherapy treatment, relative to the presenting problem, may include: postural correction; pain preventative activity modification; the provision of a sacroiliac joint belt; retraining the core-muscle stabilising system; manual therapy or rehabilitative exercise.

## The Postnatal Period

The postnatal period of 6-8 weeks after delivery - natural or caesarian - is a time of adjustment. It should be respected as a time of healing for your body. Rest is very important.

You may normally:

- experience pain in the back or pelvis as abdominal and pelvic floor muscles are stretched/damaged;
- experience difficulty controlling urine or stool, incontinence commonly persists after delivery;
- develop neck, upper back or shoulder pain as you start handling and feeding your baby

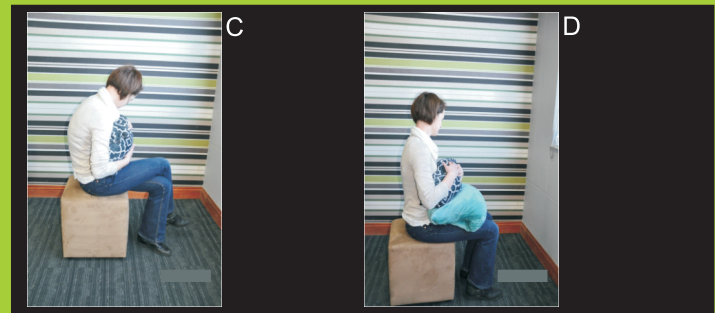
You need to take care of your body:

- try not to pick up or carry anything heavier than your baby;
- good posture is vital when standing or sitting, and whilst carrying, handling or bathing your baby;
- ensure that your baby is well supported on the pillows whilst nursing
- do not hunch or slouch.

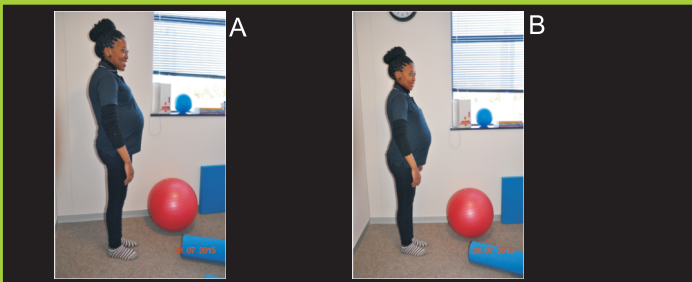
As you resume your normal activity level after the end of the postpartum period:

- your incisions or tears should have healed;
- you should experience no pain;
- incontinence should not persist.

A physiotherapy consultation is advised if you struggle with pain or incontinence during everyday activities after 8 weeks, postnatally.



A slumped feeding posture (C) is more likely to cause pain than an upright posture (D)



Changing postural alignment from swayback (A) to neutral (B) to reduce strain on the spine and pelvis.

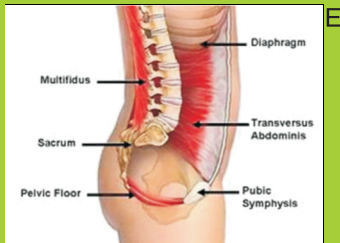
- (Wu et al 20)
- (Wu et al 2004) \*\* (Wesnes SL 201)

## Reactivating The Core: Explained.

The area of the body between the diaphragm and the pelvic floor is your 'core'. It includes the joints of the lower thorax, lumbar spine and pelvis, and sets of deep and superficial supporting muscles.

The deep core muscles comprise of the pelvic floor muscles, Transversus Abdominis (TA), Multifidus and the Diaphragm. We are not normally conscious of the functioning of this muscle system. The deep core muscles are tasked with activating to prepare the body for movement. They also activate precisely and timeously to provide muscular stabilisation and control for the lumbopelvic region during movement.

## The deep core muscles



The integrity of this system is compromised by stretching, tears or incisions during pregnancy or delivery. When deep core muscles do not activate correctly, the lower back and pelvis is left vulnerable to dysfunction, injury and pain. Inefficiency or weakness within the system must, therefore, be addressed.

*However, deep core muscles can only be strengthened if they can be activated correctly!*

To obtain a deep core-muscle contraction, the pelvic floor muscles, together with the TA and multifidus muscles must be activated.

**Breathe normally and relax the tummy muscles. Imagine drawing the coccyx and pubic bone together as you contract the pelvic floor. Gently lift lower belly away from the pubic bone to activate the TA. To activate the multifidus, imagine drawing the 2 bony protuberances on either side of your sacrum together. Now 'hold' for 5 to 10 seconds.**

Inappropriate strategies like breath-holding, tensing the outer abdominal or gluteal muscles and movement of the hips, pelvis or back should not occur during the exercise.

**Consult the physiotherapist for instruction if uncertain about achieving correct deep core activation.**

During the postnatal period, you may begin retraining the deep core muscles as soon as you are able to do so without experiencing any pain. Once you achieve confident activation, you may begin strengthening: Repeat the 'contraction and hold' for 3 sets of 10 repetitions, 4 times daily for 4 weeks only. The aim to re-establish normal function of the core stabilisers should be achieved in this time.

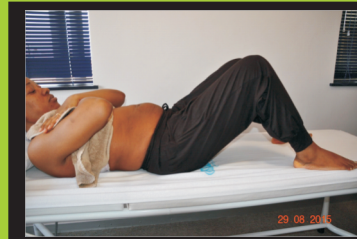
## Return to Exercise

If you wish to safely return to any form of exercise or sport after the postnatal period, it would be appropriate to first do a self-check.

## The Curl Up Test.

Lie on your back with the knees bent.

Tuck your chin into your neck and curl up the head and shoulders.



## The Leg Lift Test.

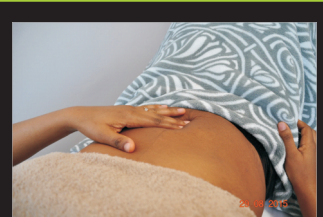
Lie on your back with the legs straight.

Lift one leg about 10 centimeters off the ground, hold for 5 seconds, lower. Repeat with the other leg,



What to look out for:

- Pain in the lower back, pelvis or pubic region
- Muscular compensation from the trunk or opposite leg to achieve a leg lift
- A feeling of the pelvic floor dropping out or descending
- The abdomen bulging or doming out. Picture H.
- A feeling of a 'soft gap' along the midline of your abdominal muscle, there may be a separation between the left and right side of the rectus abdominis muscle that your fingers can slide through. Picture I



**Should you be concerned about observing any of the above, you need to consult a physiotherapist before you begin any form of exercise.** The physiotherapist will assess your problem and develop a treatment programme of manual therapy and/ or exercise that is designed to help you achieve your goals.