## For Every Body that Moves

# Advice & Exercise for

# Antenatal Back and Pelvic Pain

**Patient Information Booklet** 



# **Contents**

Introduction	1
Advice for women with pregnancy related back and pelvic pain	2
Back care during pregnancy	2
Exercises for pregnancy-related back and pelvic pain	4
Corrective Exercises	7
Stretches	9
Exercises for Abdominal Support	10
Return to sport Post-natally	12
Pelvic Floor muscle exercise are for life	12
Changing and bathing	14
Feeding	15
Guidelines for exercise during pregnancy for healthy women	15
The benefits of exercise during pregnancy	16

## Introduction

Throughout pregnancy you produce hormones which softens the ligaments, joint capsules and the cervix. This allows increased movement in all joints. The pelvis expands as the baby grows and develop, ultimately allowing the baby to pass through during delivery. It is this movement during pregnancy that can cause pain in the back and pelvis; and it can occur antenatally or postnatally.

During pregnancy your centre of gravity changes and it moves forwards. Therefore the curvature in your lower back increases, chin pokes forwards and your shoulders become more rounded.

As the baby grows, the uterus enlarges and the stomach muscles stretch and weaken. Strengthening the pelvic floor muscles and exercising, if safe, can help. The pressure on the pelvic floor muscles increases due to the increasing size of the uterus and the need to support this. You may also notice an increase in body fat as your body starts to prepare for breastfeeding, and there is a retention of fluid.

Following birth, most changes that occur during pregnancy will return to normal. Hormones take several months to return to normal following labour and when stop breast feeding. Consequently the ligaments will remain in a relaxed state during this period. Whereas the uterus will return to just about normal by 6-8weeks. In this time frame you will have to work on correcting you posture and strengthening your stomach and pelvic floor muscles.

Some common conditions treated by Physio that occur during pregnancy are: pubic symphysitis, posterior pelvic pain, sacroiliac joint dysfunctions, spinal instability and hypomobility. The physiotherapist will explain your symptoms and condition during the assessment.

You may find it beneficial to use ice packs, wrapped in a damp cloth to prevent an ice burn. Place ice on the affected area for 5-10minutes, 3 times per day or more frequent if needed. This can help to reduce pain and inflammation.

Heat can also be used to minimise pain but the heat packs need to be wrapped in a towel to prevent burning your skin and should not be too hot. Apply to the affected areas for 10 minutes, 3-4 times per day.

Massage can help with healing and reducing pain, using deep circular motions to massage to the discomfort area 2-3 times per day for 2-3 minutes at a time.

It is common to feel sore following physiotherapy treatment, and this can take up to 5 days to alleviate.

# Advice for Women with Pregnancy Related Back and Pelvic Pain

#### DO:

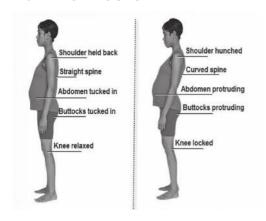
- Wear low heeled shoes. If you need to wear a heel raise, wear it at all times, and don't walk around barefooted.
- Sit with your knees together and lower back supported in a good chair.
- Sit with your knees level or lower than your hips
- Take smaller steps when walking
- Sit down when dressing/undressing
- · Showers are easier to get in and out of
- Keep your knees and toes pointed in the same direction whether walking or sitting.

#### DO NOT:

- Wear high heels
- Sit with knees apart, legs crossed or feet tucked up underneath you
- Walk fast
- Sit in soft chairs with little support
- Sit on swivel chairs unless no other option but make sure lock chair to stop it rotating. The rotation of the chair can exacerbate your pelvic and pubic pain.
- Push a big shopping trolley.

# **Back Care During Pregnancy**

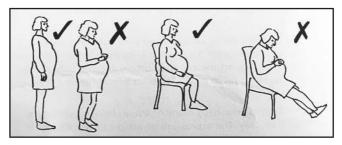
#### PREGNANCY POSTURE



CORRECT

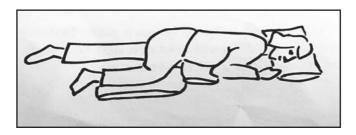
INCORRECT

#### **POSTURE**



#### **SLEEPING POSTURE**

You should avoid lying flat on you back during pregnancy as this may reduce the blood flow to you and your baby resulting in dizziness. Try sleeping with a few pillows under your head to prevent this.



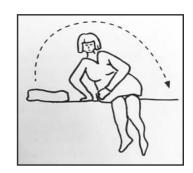
Sleeping on top of a spare duvet doubled up can make you feel more comfortable. Placing pillows between your knees when sleeping on your side can help reduce pelvic pain. A thin pillow underneath your bump can aid sleep.

#### **GETTING IN AND OUT OF BED**

To reduced any discomfort/pain on getting in and out of bed you may find it helpful to bend your knees and **keep your pelvis tilted with belly button towards your spine, engaging your pelvic floor muscles.** Thus flattening your back and protecting your pelvis.

#### **GETTING IN AND OUT OF CAR**

Keep your knees together and swivel your bottom round to get your legs in the car. Some people find sitting on a plastic bag helps to reduce friction and make this manoeuvre easier.



# Exercises for pregnancyrelated back and pelvic pain

# MAKE SURE WHEN COMPLETING THESE EXERCISES THERE IS NO PAIN AND COMPLETE ON A BED.

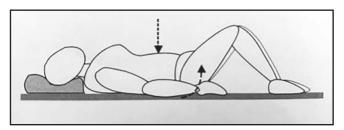
#### **INNER RANGE PELVIC TILT**

Lie on your back with your knees bent and feet flat on the bed. Pull in you tummy towards your spine and bring your pubic bone towards your breast bone (baby/bump towards you), flattening out your lower back.

Hold this position for 3-5 seconds and slowly relax halfway.

Movement should be controlled, smooth and slow.

Complete \_\_\_\_\_ x \_\_\_\_

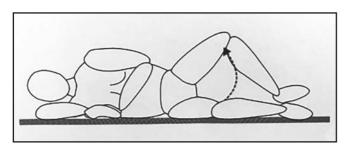


#### **GLUTEUS MEDIUS**

Lying on your side with knees and hips bent. Complete an inner range pelvic tilt and maintain throughout this exercises.

Lift your top leg upwards, keeping your heels together. Hold for 5 seconds and slowly lower knee back down. A pillow between your knees can make this more comfortable. Do not allow your pelvis to rock forwards or backwards.

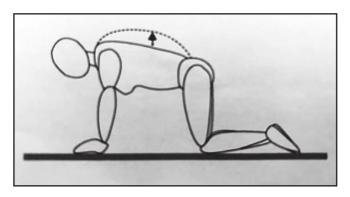
Complete x each side.



#### **ARCHING OF SPINE**

Start on your hands and knees. Complete an inner pelvic tilt to make an arch in your spine. Hold for 5 seconds and relax.

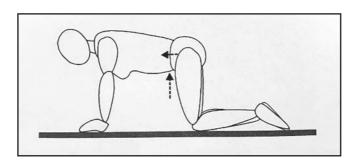
Complete \_\_\_\_\_ x \_\_\_\_



#### **TRANSVERSE ABDOMINUS**

On hands and knees, draw your belly button towards your spine and hold for 10seconds, then relax. Engage your pelvic floor muscles during this exercise.

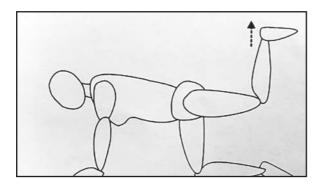
Complete \_\_\_\_\_ x \_\_\_\_



#### **GLUTEUS MAXIMUS**

Kneel on all fours. Inner range pelvic tilt with pelvic floor muscle activation and squeezing of bottom muscles. Raise one foot (sole) to the ceiling, keeping your knee bent to 90 degrees and heel towards the ceiling. From this position, lift our heel to the ceiling without arching your back.

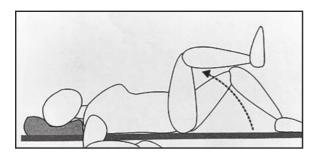
Complete \_\_\_\_\_ x \_\_\_\_ on each leg



#### SINGLE LEG RAISE

Lying on your back, engage your pelvic floor muscles and complete an inner range pelvic tilt. Lift one leg to table top position with your knee and hip at 90 degrees. Do not arch your back or let your belly button pop to the ceiling. Hold for 5seconds and control the lowering of the foot.

Complete \_\_\_\_\_ x \_\_\_\_ on each leg or alternating.



#### **LEG SLIDE**

Lying on your back with your knees bent, pelvic tilt and pelvic floor muscles engaged. Keep your pelvic and rib cage fixed as you slide one heel along the bed to lengthen your leg and return to the start position.

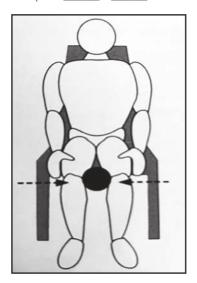
Complete \_\_\_\_\_ x \_\_\_\_ on each leg

# **Corrective Exercises**

#### **FORCED CLOSURE**

Sitting in a chair, place a ball between your knees and squeeze.

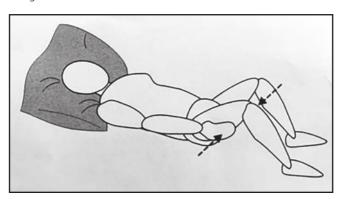
Complete \_\_\_\_\_ x \_\_\_\_



#### **RESISTED ABDUCTION**

Lie on your back and bend your knees. Feet should be flat on the bed and complete an inner range pelvic tilt. Place your hand on the inside of your thigh, and resist your leg into your hand. Work at 30% max strength.

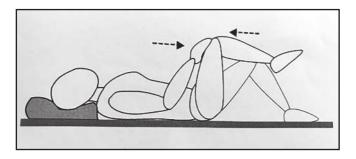
\_\_\_\_x \_\_\_ Right Left



#### **RESISTED HIP FLEXION**

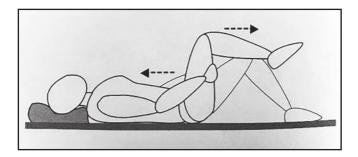
Lying on your back with your knees bent and feet on the bed. Pelvic tilt and engage pelvic floor muscles, bend one knee towards your chest and resist by placing your hand on your thigh. Work at 30% max strength.





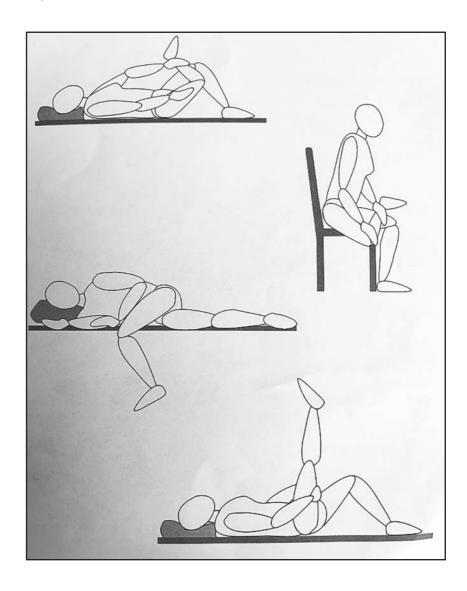
#### **RESISTED HIP EXTENSION**

Lying on your back with your knees bent and feet on the bed. Pelvic tilt and engage pelvic floor muscles, bend one knee towards your chest and resist by placing your hand on your thigh. Work at 30% max strength



# **Stretches**

Hold each one for 15 seconds to feel the stretch, but nil pain. Repeat  $\_\_\_\_\_x$ 





## **IMPORTANT!**

DO NOT EXERCISE WHEN YOU ARE TIRED.
MAKE SURE YOU HAVE A REST EVERY
DAY. GOOD POSTURE IS IMPORTANT 'WALK TALL' PULLING IN YOUR TUMMY
AND PELVIC FLOOR MUSCLES.

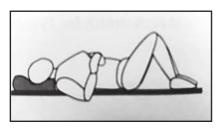
# **Exercises for Abdominal Support**

#### ABDOMINAL SUPPORT / DIAPHRAGMATIC BREATHING

Lying on your back with your knees bent and feet flat. Cross your hands over your ribs to support them and prevent them flaring.

As you breath in your stomach should rise to the ceiling, and as your breath out your hands should fall towards your spine.

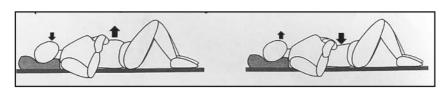
Repeat 3 deep breaths, 3 x day.



#### TRANSVERSE ABDOMINUS ACTIVATION

Lie flat on back with your knees bent and feet flat. Tilt your pelvis, engage your pelvic floor muscles and draw your tummy muscles towards your spine. This particular exercise should commence 24 hours following birth.

Repeat 10 times, 3 x day.



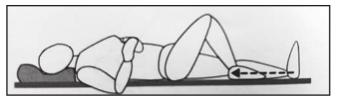
#### **KNEE DROPS**

Lie flat on back with knees bent and feet flat. Maintain inner range pelvic tilt and core/pelvic floor muscle engagement. Slowly let one knee drop out to the side without changing your pelvic position, then bring it back to the start position. Alternate sides. Repeat 10 times,  $3 \times 4$  ay.



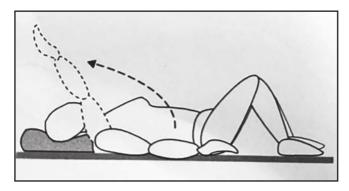
#### **HEEL SLIDES**

Lie flat on back with your knees bent and feet flat. Maintain inner pelvic tilt and core engaged. Slowly straighten one leg away from you and back to start position. Repeat 10 times,  $3 \times day$ .



#### **ARM RAISES**

Lie flat on your back with knees bent and feet flat. Maintain inner pelvic tilt and core engaged. Slowly raise your arms above your head then slowly lower.



#### **PROGRESSION**

Heel slides: lift your foot off the bed/floor by 2-3cm. Combination of foot, arm raises and heel slides together using alternate arm and leg.

# **Return to Sport Post-natally**

Once you have stopped bleeding for one full week you can return to swimming.

Low impact exercise is safe to resume 6-8 weeks post-natally such as: yoga, jogging, horse riding. If in doubt, ask your midwife or physiotherapist.

High impact exercise should commence after 12 weeks postnatally. This including: aerobics, step, running, going to the gym, and competitions. For high impact exercise you need to have good pelvic floor muscle activation to prevent further injury to your pelvic floor muscles and avoid development of a prolapse.

Returning to high impact exercise too soon can result in a vaginal prolapse.

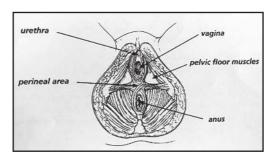
### **Sexual Intercourse**

It is advisable to not have intercourse until you stop bleeding for a week. Avoid all positions on all fours until you are 6 weeks post-natally. It is important to note, you can fall pregnant again 2 weeks post birth so contraception should be considered.

If you are breastfeeding you many need to use extra lubrication to aid vaginal dryness.

# Pelvic Floor Muscle Exercise are for Life!!!

It is important to complete pelvic floor exercises at least once per day initially, then build to frequently activating throughout the day. Always ensure you have activated and engaged your muscles before, during and after any activity such as coughing, sneezing, laughing, running etc.



Whether it is during pregnancy or following birth, it is common to experience bladder and bowel problems. Physiotherapy is able to offer a variety of treatments that can significantly help.

The pelvic floor muscles form a hammock that attaches from the base of the spine to the pubic bone at the front of the pelvis. These muscles are important for supporting the abdominal contents and preventing a prolapse. Pelvic floor muscles also help to protect and control the bladder and bowel, preventing leakage of urine, wind or faeces. Your pelvic floor muscles play an important role in sexual function as well.

As your baby grows during pregnancy, these muscles are stretched and weakened by the weight of the baby in the uterus. During a vaginal delivery the muscles become stretched significantly as the baby transfers through the pelvis. And they can tear, which consequently may result in stitches.

Hormones not only causes the ligaments to become more relaxed but weakens the pelvic floor muscles. Therefore pelvic floor exercises should be completed on a regular basis, and strengthened like any other muscle in your body.

To activate, close your front passage as though you are stopping the flow of your urine. At the same time close your back passage as if holding in wind. As you close both passages, you will feel a lifting sensation inside you.

There are two different types of pelvic floor muscles you should complete:

**Quick Squeezes** - draw up your pelvic floor quickly and strongly before relaxing. Repeat 5 times. **This will help to reduce any leaking when you cough, laugh or sneeze.** 

**Holding** - repeat above for quick squeeze but only lift the pelvic floor half way and hold for 5-10seconds. You must be able to feel the pelvic floor muscles let go. Repeat 5 times. **This will help prevent a prolapse and hep support your back and pelvis.** 

You can complete your pelvic floor muscle activation in all positions whether lying down, sitting, walking or standing or kneeling. Try to associate doing these exercises with an activity you complete daily so they become part of your daily routine. Such as washing dishes, meal preparation, cleaning your teeth or standing in a queue.

#### **TRY NOT TO**

- Hold your breath
- Use your abdominal muscles, or
- Use your buttock muscles.

If you do this, it will increased your abdominal pressure and bear down on your pelvic floor, causing them to weaken opposed to strengthen.

It is common to experience some leaking of urine during pregnancy due to the increasing pressure on your bladder and pelvic floor. Your bladder looses its tone post partum for the initial few weeks.

It is important to try and empty your bladder within 2-3 hours of delivering, and in general every 2-3 hours to prevent over stretching of the bladder.

Do not brace your feet against anyone as this can cause severe pelvic joint trauma.

Avoid deep squats when in labour.

Avoid having your knees too far apart, particularly if you have pubic pain.

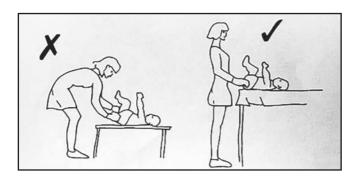
# **Changing and Bathing**

Ensure you stand with good posture, engagement of pelvic floor muscles and a pelvic tilt

Change and bathe your baby on a surface that is of the right height for you.

Avoid bending and storing over your baby. Never leave your baby unattended on a raised surface as he/she could roll off.

Make sure if you are changing or bathing your baby on the floor that you kneel on your knees, not legs out straight.



# **Feeding**

Some women find it comfortable to lie on your side to breastfeed.

Alternatively, in sitting make sure your back is supported. You can place a thin cushion between the chair and your lower back and another under the baby so you do not have to slouch. It may be a good idea to place another pillow under your arm which is supporting the baby as you feed.



# Guidelines for Exercise During Pregnancy for Healthy Women

- 1. Check with your doctor is it safe for you to start or continue with exercising.
- 2. Mild to moderate exercise (30-45 minutes), 3-5 x week is better than intermittent activity
- 3. Gradually increase the amount of exercise you do if you previously did none, if safe to do so.
- 4. Walking, cycling, swimming, pilates, yoga and low impact aerobics type activities are good forms of exercise whilst pregnant.
- 5. Do not exercise if you feel tired.
- 6. Do not exercise if you have a temperature or if the weather is too hot or humid.
- 7. Reduce bouncing, jerky movements after 20 weeks and avoid them completely during your third trimester.
- 8. Contact sports should be avoided throughout pregnancy.

# The Benefits of Exercise During Pregnancy

- Helps maintain a healthy bodyweight and avoids excess fat being laid down.
- Reduces lower back pain
- Reduced minor discomforts during pregnancy
- Improves posture and helps with balance.
- Helps to prevent gestational diabetes, high blood pressure and pre-eclampsia.
- Reduces stress
- Help to increased your ability to cope with labour and your post-natal recovery.
- Help to reduce the risk of postpartum haemorrhage and still birth.

# **Notes**

# **Further Information**

If you require further information and advice regarding this condition, please contact via the following to arrange an appointment with Nicola. The initial appointment will be an hour and all follow-ups 30 minutes:

Online booking: npphysio.co.nz



- 144 Powderham Street,
   New Plymouth
- **8** 06 757 8800
- reception@npphysio.co.nz
- npphysio.co.nz