Post Natal Exercise
Introduction

This booklet explains the benefits of exercise and important things to consider before you embark on your own exercise program.

It shows a range of stretches and strengthening exercises suitable for women who have recently given birth. The exercises have been compiled by KEMH Physiotherapy Department.

Benefits of exercise

- Reduces the risk of developing and/or dying from heart disease, diabetes, colon cancer and breast cancer.
- Reduces high blood pressure or the risk of developing high blood pressure, high cholesterol or the risk of developing high cholesterol.
- Reduces body weight or body fat, depression and anxiety, improves psychological well-being and sleep quality.
- Builds and maintains healthy muscles, bones, and joints.

Important information

When beginning exercise it is important to consider the following:

- Wear loose supportive clothing and strong supportive footwear; shorts, t-shirt and a sturdy sports bra are ideal.
- Environment: Exercise in a stable environment i.e. a gym or park, not on uneven ground. Avoid exercising in the middle of the day when the sun is at its hottest.
- Nutrition: Do not exercise on a full stomach; eat a small meal two to three hours prior to exercise. Hydrate adequately – ensure you drink one to two glasses of water half an hour before exercise and several glasses afterwards.
- Low impact exercise is preferable for the first six months after having a baby.

Effects of hormonal changes: During pregnancy and for up to six months after giving birth, changing hormonal levels cause supporting ligaments in the body to soften and become lax or stretchy. This means your joints are not as well supported and you are more prone to injury such as ankle sprains and back or pelvic injuries. Please keep this in mind when performing exercises and ensure you are in a supportive environment that minimises the risk of injury - see page 3.

If you feel pain or excessive shortness of breath at any time, cease exercise and see your doctor.
Principles of exercise

Frequency – the Health Department and National Heart Foundation currently recommend exercising on most if not all days of the week. As you commence your exercise program, start with one to two days a week and gradually build up to most days of the week.

Intensity – Aim to achieve three to five sessions of light to moderate exercise – this equates to feeling slightly breathless, but still able to hold a conversation. When you feel you are coping well with light to moderate exercise add in one to two sessions of moderate to vigorous activity.

Examples of exercise intensities:
Light - swimming for leisure and strolling.
*35-60% of Heart Rate Max = 66 – 114 beats per minute.
Moderate - purposeful walking, slow swimming, yoga and Pilates, cycling, dancing.
*60-80% Heart Rate Max = 114 – 152 beats per minute.
Vigorous – playing tennis, jogging, swimming laps, aerobics.
*80-90% Heart Rate Max = 152 – 171 beats per minute.
*Estimate based on a 30 year old female

Duration – Current guidelines recommend 30 minutes of exercise per day to maintain good health.

Your exercise program

Warm up – Commence with five minutes of gentle exercise, such as slow walking, gentle arm circles and knee Lifts. You can do any gentle movement that is similar to the activity to be performed. This is very important to prepare your body for exercise and help prevent injuries.

Stretches – Next, perform all of the following stretches. Hold each stretch for a minimum of 10-15 seconds, breathing slowly through your nose, aiming to exhale out through your mouth as you ease into the stretch.

Examples of stretches:
Triceps
Fract roll (upper back/shoulder)
Neck 1

Neck 2

Hamstrings

Front of thigh (quadriceps)

Slow roll (keep knees slightly bent as you roll up and down)

Inner thigh (adductors)

Gluteals

Calf (gastrocnemius)

Lower calf (soleus)

Side bend

Trunk rotation
Core muscles

Pelvic floor muscle exercises

The pelvic floor muscles have four main functions:

• support of the pelvic organs (the bladder, uterus and bowel)
• control of the bladder and bowel
• improve vaginal tone to help with sexual enjoyment
• support the back by working with the abdominal muscles.

To keep these muscles working well, make pelvic floor exercises part of your daily routine. See the “Physiotherapy After Childbirth” booklet for more details.

1. Sit and lean slightly forward with a straight back.
2. Squeeze and lift the muscles as if you are trying to stop wind and urine.
3. Hold the squeeze for up to five seconds, relax for up to ten seconds.
4. Repeat up to ten times, three to four times a day.
5. Keep breathing while exercising.

Abdominal bracing

Abdominal muscles are your in-built corset and work with your pelvic floor muscles to support your back and abdominal contents. This exercise strengthens the deepest layer of that corset.

1. Stand with knees slightly bent.
2. Gently and slowly, pull your belly button in towards your spine. Keep your back and pelvis still and keep breathing. Hold for five to ten seconds and repeat five to ten times. This exercise can also be practised in sitting and side lying.
3. Use this action along with your pelvic floor muscles (squeeze and lift) during exercise, while lifting and carrying.

If you leak urine and/or faeces or cannot feel the muscles working correctly, contact a women’s health physiotherapist who will be able to check whether you need alternative treatment.

Cardiovascular fitness

Choose something you find relaxing and enjoyable. You can attend a class, such as yoga, fitball, dance, aquarobics or perform your own exercise such as cycling, swimming or walking. Aim to exercise for at least 20 minutes.

REMINDER: During all exercises remember to brace your spine by drawing in your lower abdominals and lift and squeeze the pelvic floor.

Strength

Listed is a set of exercises that are designed to improve strength.

Aim to do 10 repetitions of each exercise (1 set). As you improve, progress to 2-3 sets.

Squats

• Stand with feet shoulder width apart. Both feet should be facing straight forward.
• Squeeze and lift you pelvic floor muscles and draw in your lower abdominal muscles.
• Keeping you back straight, bend your knees as if lowering into a chair.
• Bend as far as comfortable.
• Slowly rise up into an upright position.
Lunges
• Stand with one foot forward, the other back. Both feet should be facing straight forward. Be sure your front knee is over your front ankle.
• Squeeze and lift you pelvic floor muscles and draw in your abdominal muscles.
• Bend both knees until your back knee almost touches the floor, and rise up again.
• Concentrate on squeezing your buttocks to push yourself up. Maintain the body in an upright position and avoid leaning forward.

Arm weights
Find some small arm weights, 1-2kg is plenty. If you can’t find weights you can use cans of baked beans. Hold these in your hands. Stand with feet shoulder width apart. ‘Brace’ your spine by drawing in your lower abdominal muscles and squeeze and lift your pelvic floor muscles.

Deltoid
Stand with your arms at sides, palms facing into your body.
Lift your arms out to the sides to shoulder height.
Slowly lower down.

Biceps
Stand with your arms at sides, palms facing forwards.
Bend your elbows, bringing your palms up toward your shoulders.
Return to starting position.

Anterior Deltoid
Stand with your arms at your sides, palms facing behind you.
Lift your arms up in front of your body to shoulder height, keeping elbows straight. Slowly lower your arms back down to your sides.

Rotator Cuff
Stand with your elbows bent, palms facing each other.
Keeping your elbows tucked into your sides, bring your hands outwards as if drawing an arc. Return to starting position.

Latissimus Dorsi
Stand with your elbows bent and arms positioned upwards to form a stop sign position.
Raise your arms up to the roof, straightening out your elbows as you go. Slowly bend your arms back to the starting position.
**Pectorals**

Stand with your elbows bent and arms positioned upwards to form a stop sign position.

Bring your elbows and wrists in to meet each other in front of your body. Slowly push back into the starting position.

**Triceps**

Stand with both arms straight above your head, hands clasped together, both holding onto the same weight. Let your elbows bend, to drop your hands behind your head.

**Alternative:** Tricep dip – Perch on edge of a stable wide seat. Place palms down and at sides of hips, fingertips over front of seat. Slide bottom off seat.

Slowly bend your elbows to lower bottom to the ground, keeping elbows tucked in and pointing behind you. Straighten elbows and repeat.

**Core stability**

Aim to do 10 repetitions of each exercise (1 set). Progress to 2-3 sets.

**Bridging**

- Laying on a supportive mat or towel, both knees bent and feet flat. Take a deep breath in and as your exhale, curl your pelvis up to flatten the small of your back into the ground. Slowly lift your tailbone up off the ground.
- Use your bottom muscles to lift your hips into the air.
- Take a deep breath in at the top and hold.
- Breathe out and slowly lower your spine back into the ground one vertebrae at a time. At the bottom let your pelvis relax down and create a small space between your lower back and the ground.

**Progression 1 - weight shift:** Bridge up as above and gently shift weight onto one leg. Slowly raise opposite heel off the ground. Repeat other side and lower down.
Progression 2 - **single leg bridge:**
Bridge up as above and gently shift weight onto one leg. Slowly straighten opposite knee, keeping knees in line and hips still. Hold 2-3 counts, return to starting position.

Four point kneeling
- Position yourself comfortably on your hands and knees. Knees beneath hips and wrists beneath shoulders. Keep the back flat like a tabletop and chin tucked in, eyes look to the ground.
- Take a deep breath in and as you exhale bring one arm out in front of you to shoulder height.
- Bring the arm back in and repeat with the other arm.
- Now try one leg, extending out behind you and drawing back into your body. Don’t let the hip drop. Alternate for five repetitions
- Next try the opposite arm and leg as above, hold for 5-10 counts, return and repeat.
Alternate for five repetitions.

Clam shells
- Lying on your side with both knees bent up, ankles together. Hips and knees bent to 45 degrees. Place top hand in front of body for support. Brace your spine by drawing in your lower abdominals and lift and squeeze the pelvic floor.
- Lift your top knee up, like a clam shell, keeping heels together and hips still. Slowly control down.

Challenge
- Lying on your side. Top leg toes pointed in and heel pointed to the ceiling.
- Lift your top leg up into the air, hold it here.
- Bring your bottom leg up to meet the top leg and control down. Repeat.
**Single leg slides**

- Lying flat on your back with both knees bent up. Brace your spine by drawing in your lower abdominals and lift and squeeze the pelvic floor.
- Slowly slide one leg out straight along the ground, hold and bring back to your body.

**Leg lift and extension**

- Lying flat on your back with both knees bent up. Brace your spine by drawing in your lower abdominals and lift and squeeze the pelvic floor.
- Lift your leg into the air, slowly straighten leg, pushing your heel out to be parallel to the ground. Return to start position. Alternate legs.

**Plank**

- Lying on your tummy, propped on elbows.
- Tuck feet under and push up into a plank position with elbows under shoulders. Keep back and bottom straight.
- Remember to draw in your lower abdominals and squeeze and lift your pelvic floor muscles.
- Maintain steady breathing for 10 counts and lower down.

**Side plank**

- Lying on your side, legs straight. Supporting arm bent, with elbow under shoulder.
- Use top arm to lift hips off the ground, keeping legs straight. Bring top arm to waist if possible.
- Maintain steady breathing for 10 counts and lower down.

**Note:** Traditional ‘sit up’ exercises are not recommended due to excessive strain placed on the abdominal and pelvic floor muscles.
Cool down

It is important to always include a brief cool down when you finish exercising to help dissipate any lactic acid that may have been produced within your muscles during exercise. This will decrease the chance of muscle soreness the next day. It also allows the body to slowly relax back to normal rather than stopping suddenly.

1. Perform five minutes of gentle walking or slow exercises just as in the warm up.
2. Repeat all the stretches performed after the warm up.

Further information

For further information on post natal exercise classes in your area or with any queries about how to perform these exercises, please contact your Women’s Health Physiotherapist at King Edward Memorial Hospital on (08) 9340 2790.