



Endometriosis & Exercise

A Comprehensive Guide to Managing
Symptoms and Improving Health



Hi there! My name is Hannah, and I'm an Exercise Physiologist, passionate about all things Women's Health. As wonderful as we know exercise is for our health, there are some things that can get in the way of us being active. But this is where I come in!

Exercise Physiologists have so much to offer in the Women's Health space, helping women address the many barriers to being physically active, and supporting them to achieve their goals.

This book will focus specifically on endometriosis, and the important role an Exercise Physiologist can play in helping women with this condition remain healthy and physically active.

Contents

1. Understanding Endometriosis

- What is Endometriosis?
- Common Symptoms
- Diagnosis & Treatment
- Stages of Endometriosis

2. What is an Exercise Physiologist?

3. Benefits of Seeing an Exercise Physiologist for Endometriosis

- Pain Management
- Musculoskeletal considerations
- Post-Surgical Recovery
- Hormone Management
- Quality of Life

4. Exercise Recommendations for Endometriosis

5. Important Considerations

6. Closing Thoughts

7. Contact Information

A woman with long dark hair is shown from the chest down to the thighs. She is wearing a white ribbed tank top under a beige ribbed cardigan. She is holding both hands on her lower back, indicating pain or discomfort. She is sitting on a grey couch. The background is a plain, light-colored wall.

Understanding Endometriosis



What is Endometriosis?

Endometriosis is a chronic inflammatory condition where tissue similar to the lining of the uterus grows outside of it, primarily affecting the pelvis and reproductive organs. It impacts about 1 in 9 women of reproductive age in Australia, with an average diagnosis delay of 7 to 12 years. It's a condition that impacts on all aspects of life, including physical, financial, relationship, emotional & mental health.

Typically, endometrial tissue grows inside the uterus and responds cyclically throughout the menstrual cycle. During this cycle, the tissue thickens in preparation for a fertilised egg to implant. If implantation doesn't occur, the tissue is shed during menstruation.

In endometriosis, the endometrial-like tissue outside the uterus behaves the same way—swelling, thickening, and shedding. However, because this tissue is not inside the uterus, it has no way to exit the body. This leads to the formation of scar tissue and adhesions, which cause the painful symptoms associated with the condition.

Common Symptoms

Infertility

Anaemia

Stress urinary incontinence

Pain with sex & penetration

Fatigue

Gastrointestinal issues

Chronic low back pain

Painful urination

Heavy bleeding

Cramping

Constipation

Pain





Diagnosis & Treatment

The only way to definitively diagnose endometriosis is through a diagnostic laparoscopy, during which a tissue sample is taken.

A laparoscopy is a surgical procedure performed under general anaesthesia, where a thin tube with a camera is inserted through the belly button. This allows the doctor to view the inside of the abdomen and examine the pelvic organs. The procedure offers magnification, making it possible to spot even small areas of endometriosis. If suspicious tissue is found, it is removed during the laparoscopy and sent to a lab for microscopic examination to confirm the diagnosis.

Once endometriosis is diagnosed, treatment options may include:

- Laparoscopic surgery, either through **excision** (removal of endometrial tissue using cutting), **ablation** (destroying the endometriosis cells using heat), or a combination
- Pain relief medications
- Pelvic health physiotherapy, including internal release techniques for the pelvic floor
- An anti-inflammatory diet to manage inflammation caused by endometriosis
- Hormonal treatments: The Pill, progesterone-only IUD, mini-pill, or GnRH antagonists



Stages of Endometriosis

The most used and best-known classification system of endometriosis was developed by the American Society for Reproductive Medicine (ASRM). The ASRM classification system is divided into 4 stages or grades according to the number of lesions and depth of infiltration:

Endometriosis Stage	Manifestation of the Condition
STAGE 1 (1-5 points)	Minimal. Few superficial implants
STAGE 2 (6-15 points)	Mild. More & deeper implants
STAGE 3 (16-40 points)	Moderate. Many deep implants, small cysts on one or both ovaries, presence of filmy adhesions
STAGE 4 (>40 points)	Severe. Many deep implants, large cysts on one or both ovaries, many dense adhesions

The classification also uses a point system to try to quantify endometriotic lesions. This point system allows for a way to numerically scale the disease.

A score of 15 or less indicates minimal or mild disease.

A score of 16 or higher may indicate moderate or severe disease

However, it should be noted that the severity or the score of the disease does not necessarily correlate to the level of pain or presence of other symptoms.

A photograph of two women in a gym or studio setting. The woman on the left is smiling and looking towards the camera, wearing a black tank top and black wristbands. She is sitting on a pink mat with her hands clasped. The woman on the right has long blonde hair and is seen from the back, wearing a red and black top. They are in front of a brick wall with a large window. A semi-transparent dark grey box with white text is overlaid on the bottom half of the image.

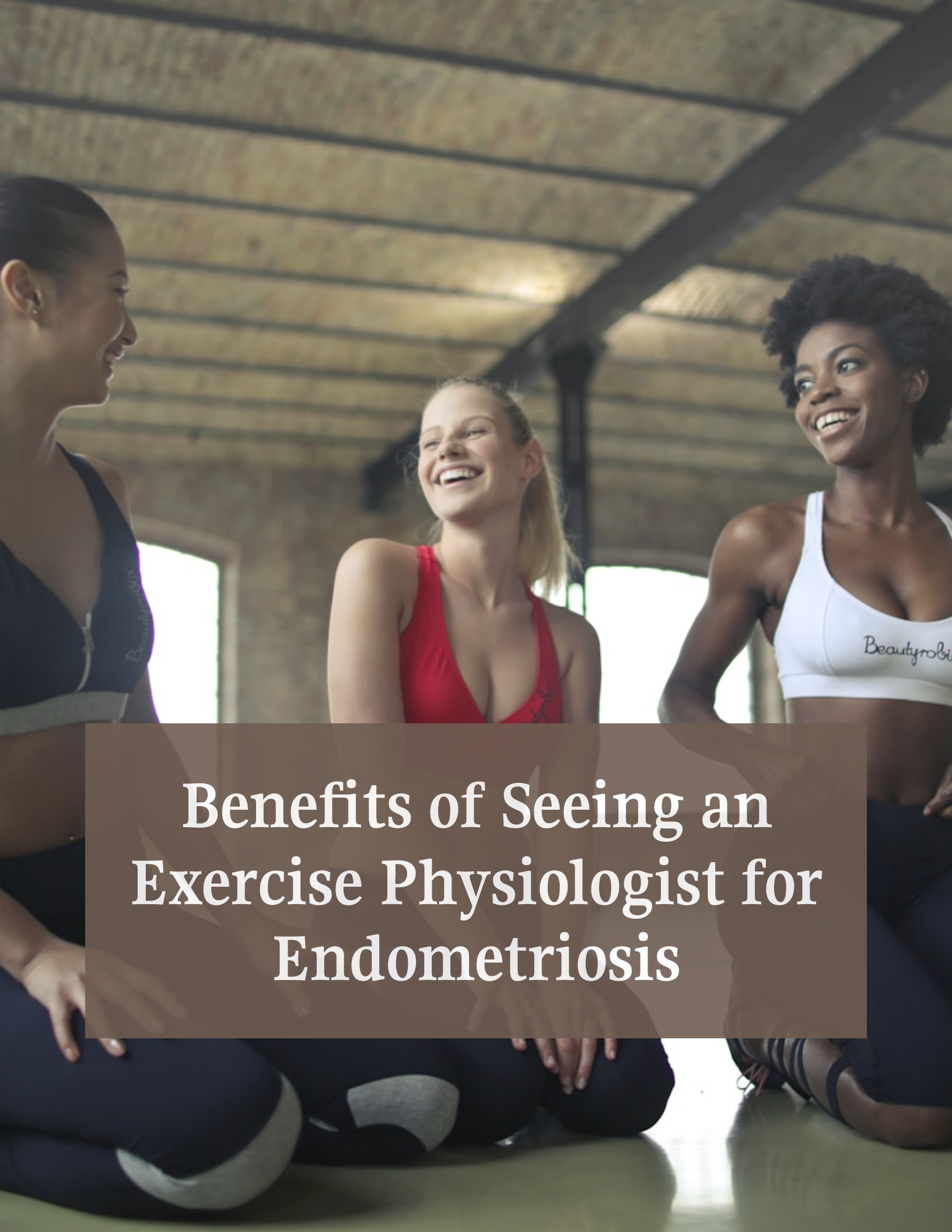
What is an Exercise Physiologist?



An exercise physiologist is a qualified healthcare professional that holds a minimum of 4 years of university training.

They give people information and advice about exercise to help them manage and prevent injuries and chronic conditions.

They put together individual exercise programs, and provide advice & education on how to maintain an active lifestyle and make sure that exercise programs are safe, effective and appropriate for the person.

A photograph of three women in a gym or studio setting. They are all smiling and looking towards each other, appearing to be in a positive conversation. The woman on the left is wearing a dark blue sports bra with 'Beautyrobics' written on it. The woman in the middle is wearing a red sports bra. The woman on the right is wearing a white sports bra with 'Beautyrobics' written on it. They are all wearing athletic leggings. The background shows a wooden ceiling and large windows.

Benefits of Seeing an Exercise Physiologist for Endometriosis

Pain Management

Exercise is key in the biopsychosocial approach to chronic pain management.

When we experience pain for a long time, ‘pain central sensitisation’ can manifest, which essentially makes you feel more pain than usual. In other words, your pain threshold reduces and you become more sensitive to pain.

Exercise helps by gradually reducing this sensitivity and calming your body's stress response, which causes things like muscle tightness, high blood pressure, and a fast heart rate.

While physical activity is essential for chronic pain recovery, it needs to be:

01

Gradual (graded exposure) to improve your exercise tolerance

02

Individualised - based on your individual goals, values & baseline tolerances

Progressive muscle relaxation (PMR) is a technique that is used to manage anxiety & reduce chronic pain.

In endometriosis, the muscles surrounding your pelvis & abdomen usually have high resting muscle tone (tension) as a protective response from the brain. If we can learn to relax the muscles surrounding these areas, we can begin to desensitise the system.

The “Smiling Mind Sleep Meditation: Body Scan” on Youtube is a great video to watch to put this into practice!





Musculoskeletal Considerations

Due to the high resting muscle tone around the pelvis, your pelvic floor can be greatly impacted as a result of endometriosis. Tense pelvic floor muscles can contribute to those frustrating endometriosis symptoms you may experience, such as:

Pain with sex & penetration

Painful defecation

Stress urinary incontinence

Additional musculoskeletal pain through the pelvis, lower back & legs

Resistance training & mobilisation exercises can aid in lengthening & strengthening through the front of the body. By improving your tolerance for exercise, you can reduce intra-abdominal pressure & improve your pelvic floor function.

Post-Surgical Recovery

Surgical treatments for endometriosis include laparoscopy or laparotomy.

As mentioned, a *laparoscopy* is a surgical procedure performed under general anaesthesia, where a thin tube with a camera is inserted through the belly button.

A *laparotomy* is where the abdomen is opened through a large incision either through a bikini line cut, or occasionally through a lengthwise cut from the belly button down to the pubic area.

Surgery for endometriosis is usually performed by laparoscopy because it causes:

Less scarring

Less pain

Less time in hospital

Better visualises the areas where endometriosis can grow

Small bleeding points can be more easily seen



After surgery, gentle movement and targeted exercises can help restore strength and flexibility to the affected area, reduce the risk of scar tissue formation or adhesions, & improve overall mobility. However, there are certain guidelines that should be followed initially post surgery:

Weeks 1-2: Return to gentle activity, e.g. walking

Weeks 3+: Return to work, sex & low intensity/impact exercise as tolerated

Weeks 1-4: No heavy weight-lifting or vigorous exercise

Hormone Management

Regular moderate-intensity aerobic exercise boosts the levels of certain chemicals with anti-inflammatory properties (known as cytokines) in the body that help reduce inflammation and also lowers the effects of estrogen, which can help slow down the growth of endometrial tissue.

Research has shown a 70% decreased risk of endometrioma in advanced stage endometriosis when frequent & regular high-intensity physical activity (i.e. 30mins of aerobic exercise 3x/week for 2 years). Approximately 50% of these women exercised ≤ 3 hours a week & still experienced a reduction in endometrioma risk. This tells us something is always better than nothing!

Endometrioma = usually benign growths, most often found in the ovary. They are the most common form of endometriosis, affecting 17–44% of patients with the condition.



Quality of Life

Exercise is a great way to boost self-confidence, encourage social interaction, and help reduce stigma, while also improving pain levels, cardiovascular fitness, and overall health outcomes.

A woman with dark, curly hair is shown from the chest up, wearing a teal-colored top. She is looking slightly to the right with a calm expression. Her right arm is raised, with her hand near her head. The background consists of large, bright windows that let in natural light, creating a soft, airy atmosphere. A semi-transparent dark brown rectangular box is overlaid on the lower half of the image, containing the title text in white.

Exercise Recommendations for Endometriosis



Pain and discomfort are common in endometriosis and often trigger a guarding response in the body, where muscles tense up to protect from pain - similar to curling up into a ball.

In endometriosis, this response usually affects muscles in the front of the body, including the pelvic floor, abdominal wall, hip flexors and inner thigh muscles.

As a result, these muscles can get stuck in a shortened state, making it hard for them to lengthen and contract properly.

Therefore, when resuming exercise, it is important to first focus on teaching the muscles how to lengthen & let go with control.

The following stretches can really help to release those muscle groups that are often tight!

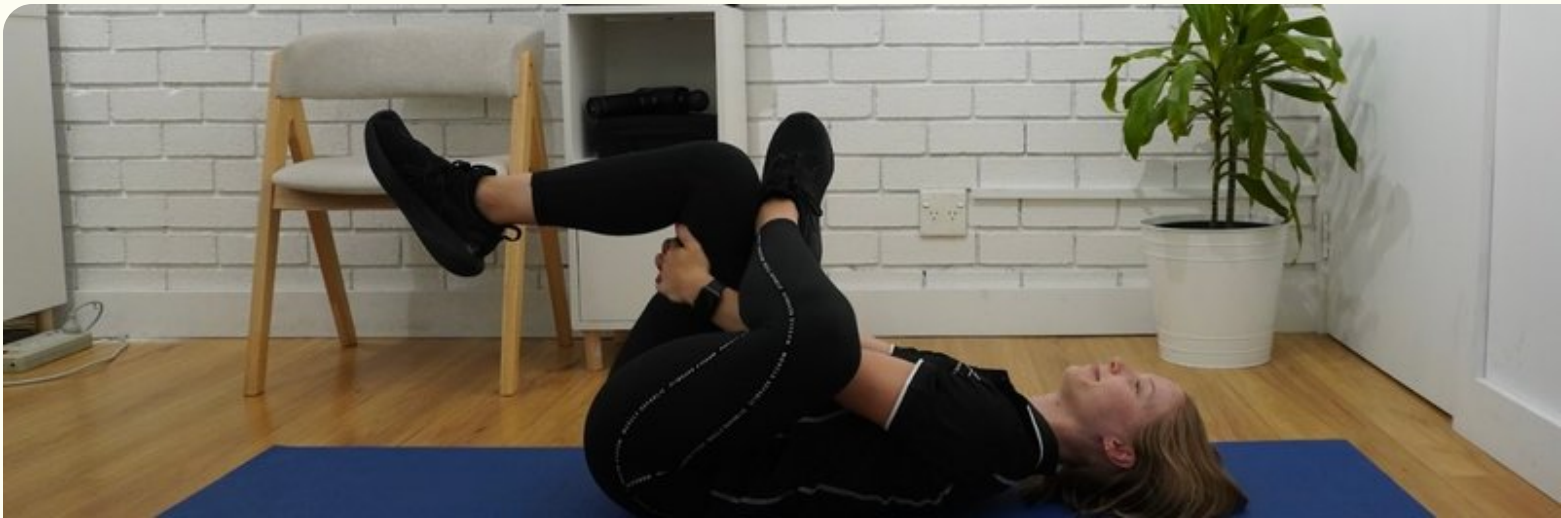
Lying Glute Stretch:

Start by lying down on your back with your knees bent and your feet flat on the floor.

Lift one foot off the floor and place the outside of your ankle on top of your other knee, then lift your leg up and lock your hands together behind your knee.

Slowly pull your knee towards your chest until you feel a stretch across the back of your hips.

Hold for 20–30 seconds. Switch legs and repeat.





Hip Flexor Stretch:

Kneel on your affected leg, bend the other leg out in front of you, and slowly push your hips forward.

You should feel a stretch in the upper thigh of your back leg and hip.

Hold for 20–30 seconds. Switch legs and repeat.



Side Bend Stretch:

Start by standing with your feet together, head up and chest tall.
Raise your hands above your head and hold your hands.

Keeping your arms straight, lower your hands to one side as you push your hips in the opposite direction until you feel a stretch in your side.

Hold for 20–30 seconds. Remember to keep your hips facing forward throughout the exercise. Switch sides and repeat.

Cobra:

Lie on your stomach on a mat with your hands under your shoulders and your palms facing down.

Pressing your hands into the mat, lift your chest off the ground while keeping your hips pressed into the mat.

Hold for 20–30 seconds.



Lying Inner Thigh Stretch:

Lie on your back and bend one knee, then the other, keeping your feet flat on the floor.

From this position open your hips, dropping both knees out to the side and bring the soles of your feet together.

Hold for 20–30 seconds.





What's next?

Once these muscles are relaxed & so long as your symptoms aren't aggravated, you can start to strengthen these muscle groups.

Gentle progression into resistance-band exercises are an excellent way to support the lumbo-pelvic region and can help reduce symptoms by balancing out that bracing and tightness through your core muscles.

Some
strength
exercises to
try at home...



Side Lying Leg Raises:

Lie on your side with legs stacked on top of each other.

Slowly lift your top leg upwards, pointing the toe of your upper leg towards your shin. Ensure your leg stays straight.

Lower the leg back down.

Repeat 8-12 times on one side, before repeating on the other side.



Banded Sit To Stand:

Sit up straight on a chair with a resistance band just above your knees. Keep your legs just wider than hips width apart, with some tension in the band.

Keeping hands on hips, stand up, pushing your knees outwards against the resistance of the band. Control the movement as you sit back down.

Repeat 8-12 times.



Banded Glute Bridge:

Place a resistance band loop around both thighs, just above your knees.

Lie on your back with your knees bent and feet flat on the floor. Place legs hips width apart so that there is tension in the band.

Raise your hips up into a bridge, keeping the knees hips width apart. Control the movement back down to the start position, maintaining constant tension on the band.

Repeat 8-12 times.

Bird Dog:

Start on all fours with your hands under your shoulders and your knees under your hips. Imagine you are balancing a coffee on your back.

Reach one leg up and out behind you so it's in line with your back. At the same time, reach the opposite arm straight out in front.

Hold the position for a few seconds, then lower back down to the starting position.

Repeat with the opposite arm and leg. Repeat 8-12 times.



Once these
movements are
feeling good, we can
progress to more
functional strength
movements, so you're
building strength
without flare-ups!

Other Exercise Modalities

Moderate-intensity aerobic activity (enough to “huff and puff”) is a great addition to the above exercises.

If you are currently sedentary or engage in irregular and/or low levels of weekly physical activity, start with sessions of short duration (< 20 minutes) at low-moderate intensity.

Gradually increase duration and/or intensity according to symptom control and fitness levels.

Exercise Intensity	Level of Exertion
Low intensity	Able to maintain a conversation easily whilst exercising
Moderate intensity	Able to maintain a conversation, but slightly out of breath
High intensity	Unable to maintain a conversation whilst exercising

Disclaimer

The exercises outlined in this book are designed to promote health and wellbeing.

However, if you experience pain, discomfort, or have concerns about performing any of the exercises, we strongly recommend that you stop immediately. It's important to listen to your body and avoid pushing through pain.

It's best to consult with an Exercise Physiologist who can educate you on the right type of exercise and supervise you as you begin using exercise to manage pain and symptoms, before transitioning to a more self-guided routine.



Important Considerations

After an initial endometriosis diagnosis, it's advisable to avoid certain exercises, such as:

High-intensity abdominal exercises (e.g., crunches) that strain the abdominal wall, commonly found in Pilates

High-impact activities (e.g., running, burpees, box jumps)



Why is this necessary?

As mentioned, muscles in the front of the body—such as the pelvic floor, abdominal wall, hip flexors, and inner thighs — can become tight as a result of endometriosis.

Exercises that further tighten or restrict these muscles, like the ones listed above, can lead to painful flare-ups.

For this reason, exercise, like Pilates, which target the deep abdominal and pelvic floor muscles, are often not recommended early on, as they may trigger discomfort.

However, with proper symptom management, it is possible to gradually return to these exercises.

The key is to address pain and symptoms first before increasing the intensity or resistance of your workouts.



Closing Thoughts

If you're living with endometriosis, it's important to remember that while exercise may not provide a cure, it can be a powerful tool in managing your symptoms and improving your overall well-being.

Regular physical activity can help reduce pain, alleviate stress, regulate hormones, and boost energy levels, making it an essential part of your self-care routine.

The key is finding an exercise regimen that works for YOU —one that listens to your body, respects your limits, and enhances your quality of life.

As you continue on your journey with endometriosis, know that you're not alone, and with the right support and guidance, you can embrace an active, fulfilling life!

Hannah Tebbutt

Exercise Physiologist

Email: hannah@activeanswershealth.com.au

Phone: (02) 9907 9667

Address: 1-3 Burnt Street,
Seaforth Sydney
NSW 2092



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