

STRONG & EMPOWERED!

The Ultimate Guide to Exercise and Wellness During Menopause



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!

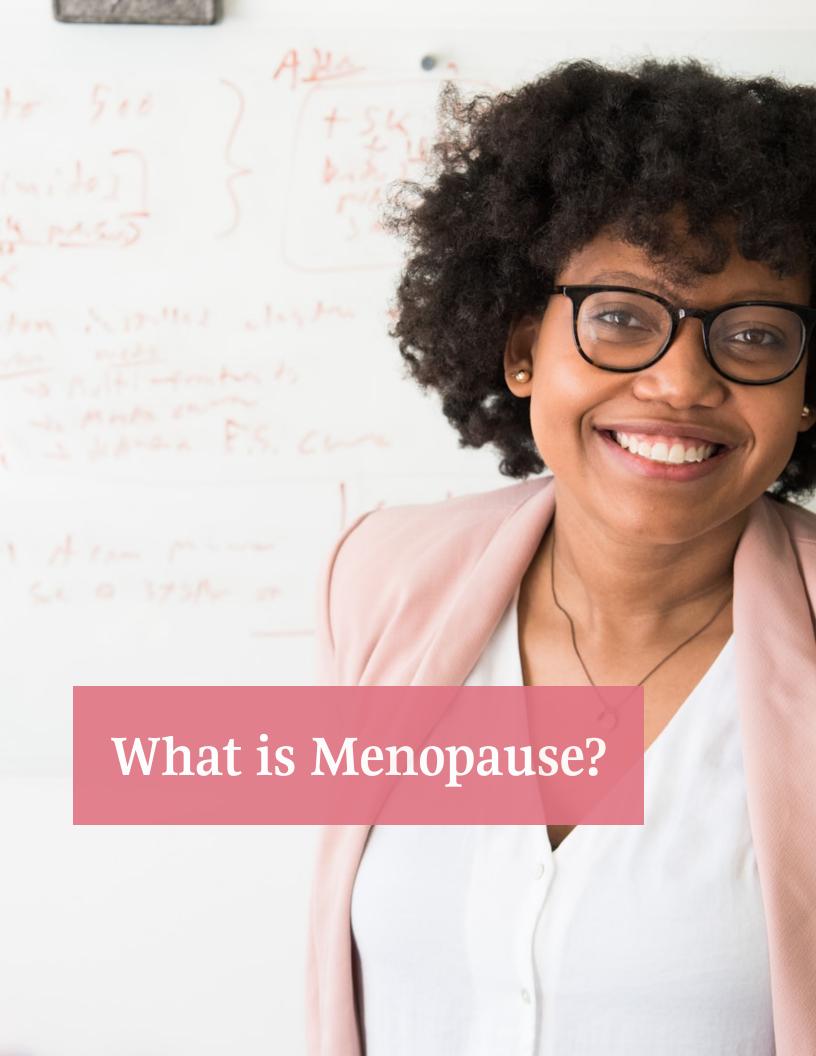
Exercise Physiologists have so much to offer in the Women's Health space, helping women address the many barriers to being physically active, and supporting them to achieve their goals.

This book will focus on <u>menopause</u> and highlight the crucial role an Exercise Physiologist plays in helping women stay healthy and physically active during this stage of life.

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Menopause refers to the end of menstruation & is said to have occurred when a woman has not had a period for 12 months. At this point, women are considered postmenopausal.

Most women reach menopause between 45-55 years. In Australia, the average age of menopause is 51-52 years. However, menopause can occur prematurely due to surgery (e.g. hysterectomy), as well as chemotherapy or radiation, which cause the ovaries to stop producing estrogen.

# Peri-menopause

Estrogen and progesterone levels begin to fluctuate.

May begin to experience mood changes, irregular menstrual cycles (less / more frequent & heavier / lighter) and other menopausal symptoms.

# Menopause

This is when you'll have your final menstrual period. You won't know for sure it's happened until you've gone a year without one.

Hot flashes, vaginal dryness, sleep problems, and other symptoms are common in this stage.

# Post-menopause

This begins when you hit the 1 year mark from your final period. Once that happens, you'll be referred to as postmenopausal for the rest of your life.

# **Common Symptoms**

PHYSICAL	EMOTIONAL
Hot flashes & night sweats	Mood changes (unhappy/depressed)
Sleep problems	Tiredness
Headaches	Forgetfulness
Muscle & joint pains	Brain fog / difficulty focusing
Dry vagina	Anxiety
Sore breasts	

# The majority of these symptoms can be attributed to the decline of <u>2 hormones</u>

#### Estrogen

Causes most of the symptoms of menopause

Largely influences reproductive function, metabolism, fat storage, thermoregulation, and your response/recovery to exercise.

#### Progesterone

Largely influences mood and anxiety/irritability.

# Changes that happen to the body...

These changes in hormones can impact on other body systems, including our musculoskeletal, metabolic & cardiovascular systems.

#### Musculoskeletal

#### More rapid reduction in:

Bone mineral density

Tendon degeneration

Skeletal disc degeneration

Loss of muscle mass (including pelvic floor muscle tone)

#### Metabolic

Reduction in metabolic rate, contributing to weight gain, especially around the waist

Increased insulin resistance

#### Cardiovascular

#### The risk of cardiovascular disease increases due to changes in:

Blood vessel elasticity, whereby the blood vessels become stiffer, increasing blood pressure

Cholesterol levels, where we see an increase in low-density lipids ("bad kind") & reduction in high-density lipids ("good kind"). This results in fatty deposits building up inside the large blood vessels, resulting in narrowing of the arteries.



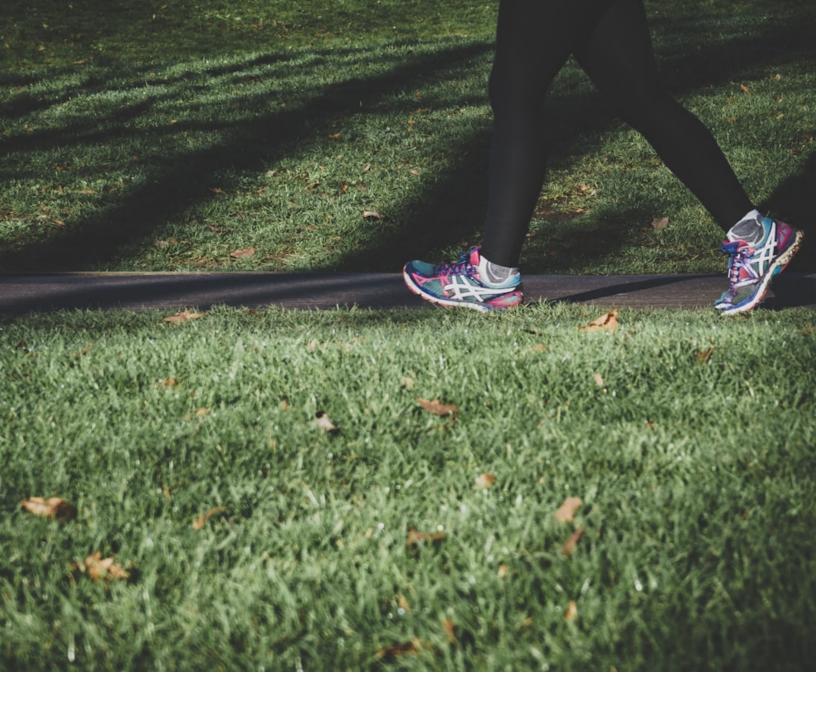


An exercise physiologist is a qualified healthcare professional that holds a minimum of 4 years of university training.

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.





Staying generally active and participating in an exercise program can help with both symptom management of menopause and long-term health outcomes.

#### Exercise can help with management of:

Vasomotor symptoms, e.g. hot flashes & night sweats, which occur due to the constriction / dilation of blood vessels Psychological symptoms, e.g. depression, anxiety & impaired memory & concentration Musculoskeletal symptoms, e.g. joint & muscle pains, tendinopathies **Headaches and dizziness** Urinary & faecal incontinence & pelvic organ prolapse Exercise in post-menopausal and perimenopausal women can result in: Maintenance of bone mineral density Reduced risk of developing cardiovascular disease Improved endothelial function - important for maintaining healthy blood flow & preventing blood clots Improved insulin sensitivity Reduced risk of developing metabolic syndrome - a group of conditions that together increase your risk of cardiovascular disease, type 2 diabetes & stroke Improved quality of sleep Improved mental health and wellbeing

Increased quality of life

# Let's revisit those changes that happen to the body during menopause...



& explore how exercise can positively impact them!

#### Musculoskeletal

Resistance training and pelvic floor muscle training can help in loading the bones, muscles and tendons to maintain or reduce the risk of:

Osteopenia, osteoporosis & fractures

—————
Pelvic floor dysfunction, e.g. urinary incontinence & pelvic organ prolapse
——————
Chronic joint pain, e.g. osteoarthritis

#### Cardiovascular

<u>Aerobic exercise</u>, e.g. walking, swimming, bike riding, dancing or social sport, can help:

Improve all cardiovascular health markers

Reduce the risk of atherosclerotic changes - the buildup of fats, cholesterol & other substances in / on the artery walls

#### Metabolic

Moderate intensity exercise, whether <u>resistance</u> <u>training</u>, <u>aerobic training</u> or a <u>combination</u> can help with improving insulin sensitivity.





Before beginning an exercise program, all postmenopausal women should have their pelvic floor strength assessed by a pelvic floor physiotherapist.

If pelvic floor dysfunction is suspected, exercise prescription should aim to minimise large increases in intra-abdominal pressure and avoid excessive strain being placed upon the pelvic floor organs and muscles to reduce the risk of stress urinary incontinence and pelvic organ prolapse.





Bones are living tissues. They are constantly broken down and replaced with new bone tissue in an ongoing cycle. Your bones reach their maximum size and strength ('peak bone mass') in your early 20s.

Research shows the higher your peak bone mass, the better protected you are against bone loss, fractures & osteoporosis later in life.



## **Exercise & Bone Growth**

There are 3 specific types of exercise that help maintain or build bone strength and reduce bone loss:

Weight-bearing / impact exercise

Resistance (strength) training

Balance training

#### Weight-bearing / impact exercise

Involves bearing your own weight and landing firmly.

E.g. jumping, jogging, skipping, stair climbing

Research shows that fast walking for at least 30 minutes a day, 3 or more times a week, can help prevent bone loss in premenopausal women.

#### Resistance training

Moving your body against some type of resistance, e.g. dumbbells, resistance bands, other gym equipment or your own body weight.

Strengthens muscles around bones that are more at risk of fracture, e.g. hips, wrists & spine.

Exercise should start at your level of fitness & build in intensity over time. It must be regular & consistent to have benefit.

E.g. overhead press, squats & deadlifts

#### **Balance training**

A major cause of bone fracture in older women is falls.

Research shows that balance training improves balance and mobility and reduces the risk of falls.

E.g. standing on one leg



# How does exercise influence bone?

When a person becomes active or increases their activity levels, the bones modify their shape and/or size to withstand the new loads.

Once a bone has adapted to an activity however, it ceases to change, therefore increasing exercise intensity and/or changing activities is necessary to continue to stimulate positive bone adaptation.

# Diet & bone growth

#### **Calcium**

Calcium helps strengthen your bones. It's also needed for a healthy heart, muscles, blood and nerves. About 99% of your body's calcium is found in your bones.

Your body can't make calcium, so you need to get it from food. You may need to take calcium supplements if you don't get enough calcium in your diet.

If there's not enough calcium in your diet, your body will take what it needs from your bones. This can increase your risk of developing osteoporosis.

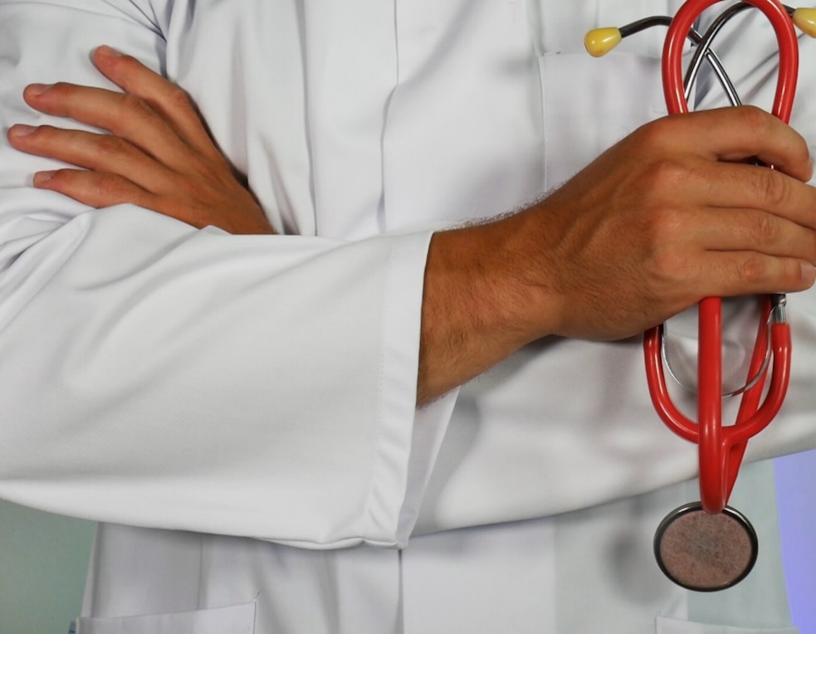
#### Vitamin D

Vitamin D helps the body absorb and retain calcium, which is important for strong bones and muscles.

Your body produces vitamin D when your skin is exposed to sunlight.

Vitamin D3 can also be found in certain foods, e.g. fatty fish & eggs.

It is best to speak to a dietician or nutritionist if you would like more information!



### Bone checks

A bone health check includes the assessment of risk factors for osteoporosis, e.g. family history & calcium and vitamin D intake.

A bone check should be done every year after menopause & after breaking a bone (e.g. from a fall).

If you have risk factors for osteoporosis, your doctor may give you a referral to get a bone density scan called a 'DXA scan'.

A DXA scan is a special X-ray that measures your bone mineral density. It can also be used to:

Confirm a diagnosis of osteoporosis

Check how much bone loss has happened

Check if any treatment for osteoporosis is working.

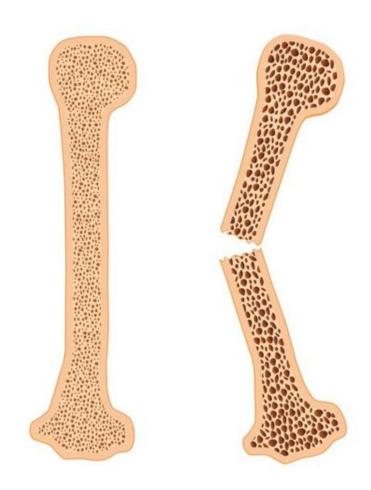
Blood tests may also be used to check calcium and vitamin D levels, as well as your thyroid function. Problems with your thyroid can lead to osteoporosis.

# Osteoporosis

Osteoporosis occurs when bones lose their density and become thin, weak & fragile.

This makes them more at risk of fracture, even from something as simple as a minor bump.

Often there are no signs or symptoms of osteoporosis until a fracture occurs.



# Any bone can be affected by osteoporosis, but the most common sites are:

Hip
Spine
Wrist
Ribs
Pelvis
Upper arm

The older you get, the greater the risk of osteoporosis. In Australia, approximately 23% of women over 50 have osteoporosis.

#### Other risk factors include:

Early or premature menopause
Certain medication (e.g. warfarin, thyroid hormone)
Some medical conditions (e.g. coeliac disease, inflammatory bowel disease, diabetes, thyroid conditions, rheumatoid arthritis, anorexia nervosa)
Breaking a bone when you're over 50



# **Closing Thoughts**

As you move through menopause, exercise can be a powerful tool to support your body and mind.

It helps manage symptoms, boosts energy, improves mood, and strengthens bones and muscles.

Remember, there's no perfect formula. Whether it's yoga, walking, or strength training, find what works for YOU — one that listens to your body, respects your limits, and enhances your quality of life!

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