

MENOPAUSE & EXERCISE

PUBLIC



MENOPAUSE, EARLY ONSET MENOPAUSE AND PERI-MENOPAUSE

Menopause is usually a natural process defined as the permanent end of menstruation. The definition is made 12 months after the final menstrual period.

Menopause can also be the result of surgery such as a hysterectomy, or as a side effect from cancer treatment as the ovaries stop producing oestrogen.

Perimenopause is the initial stage of menopause and sees fluctuations in oestrogen and progesterone levels. Perimenopause can last anywhere between 1 and 10 years but has an average duration of 4 to 6 years. During perimenopause your menstrual bleed may become irregular, either less frequent or more frequent, or have a continually changing pattern. Bleeds may also become heavier or lighter and symptoms of hot flushes, disrupted sleep and mood disturbances often begin.

Early onset menopause is when a woman experiences her final menstrual cycle before the age of 45 years, and premature menopause is prior to the age of 40. Premature or early onset menopause can be as a result of pharmacotherapies, surgery, or can occur naturally.

THE BENEFITS OF EXERCISE FOR MENOPAUSE

Staying active and participating in individualised exercise can help with both symptom management of menopause and long-term optimal health. The fall in oestrogen levels that occur during perimenopause and menopause are responsible for many of the symptoms reported – including hot flushes, disrupted sleep, and mood disturbances. Oestrogen affects many systems within the body which is why there is such a wide variety of changes at menopause.

Exercise can help with optimising long-term health after menopause – including maintaining bone mineral density and reducing the risk of osteoporosis or osteopenia, reducing cardiovascular risk factors, maintaining a healthy weight range, pelvic floor health and improving balance.

Exercise can help with management of:

- Hot flushes and night sweats
- Psychological symptoms often seen such as depression, anxiety and impaired memory and concentration
- Joint pain, headaches and dizziness
- Incontinence

Exercise in post-menopausal and peri-menopausal women can result in:

- Maintenance of bone mineral density
- Reduced risk of developing cardiovascular disease
- Improved endothelial function (reducing risk of atherosclerotic changes and high blood pressure)
- Improved quality of sleep
- Improved insulin sensitivity (reducing risk of diabetes and issues with blood sugars)
- Improved mental health and wellbeing
- Increased quality of life

THE EFFECTS OF EXERCISE

Musculoskeletal

The hormonal changes of menopause, i.e. the loss of protective hormones, cause skeletal effects including a more rapid reduction in bone mineral density than at any other stage of life, tendon degeneration and loss of muscle. Resistance training and pelvic floor muscle training can help in loading these bones, muscles and tendons to reduce the risk of osteopenia, osteoporosis, fractures, pelvic floor dysfunction (such as urinary incontinence or prolapse), and chronic joint pain.

Cardiovascular

The cardiovascular effects of menopause include endothelial dysfunction, increased systolic blood pressure, increased LDL (bad) cholesterol and triglycerides, and decreased HDL (good) cholesterol. Aerobic exercise such as walking, swimming, bike riding, dancing or social sport can help improve all these cardiovascular health markers and reduce the risk of atherosclerotic changes.

Metabolic

Menopause also sees the risk of developing the metabolic syndrome increase as the hormonal changes lead to increased insulin resistance. Indigenous Australian, Polynesian and South Pacific Islander and Indian women are at heightened risk of developing the metabolic syndrome. Moderate intensity aerobic exercise (that's exercise at a level that you can comfortably talk, but not sing, and your heart rate is up), resistance training or a combination can help with improving insulin sensitivity.

OPTIMAL EXERCISE PRESCRIPTION

The benefits of exercise for post-menopausal women have been well researched. The primary aim of exercise prescription will vary depending on your health concerns and goals, however an exercise program should meet the general physical activity recommendations of 150 minutes per week of moderate intensity aerobic exercise, or 75 minutes of vigorous exercise, and 2 non-consecutive days

of resistance training. These are seen as the minimum requirements of adults for general health and well-being.

Exercise prescription should take into consideration:

- Exercise history
- Individual goals
- Exercise that is enjoyable
- Chronic health conditions or injuries

An optimal exercise prescription should be individualised and prescribed by an Accredited Exercise Physiologist (AEP) and include resistance training, pelvic floor muscle training, balance training, aerobic activity and power training. Research has shown that exercise that is completed in a social setting, in a small group class or with a friend, also has associated improvements in mental health, quality of life and program adherence.

Before beginning an exercise program all postmenopausal women should have their pelvic floor strength assessed by a women's health AEP, regardless of if you have had previous pregnancies, vaginal deliveries or a hysterectomy.

If pelvic floor dysfunction is suspected, exercise prescription should aim to minimise increases in intra-abdominal pressure and avoid strain being placed upon the pelvic floor organs and muscles to reduce the risk of pelvic organ prolapse or incontinence. This may include the modification or exclusion of certain exercises that require a breath holding strategy (known as Valsalva manoeuvre). Your pelvic health AEP will work with you to learn appropriate strategies so that you can participate in higher risk exercises such as some abdominal or pilates exercises, or high impact exercises such as running and jumping. It is important that you aren't limited unnecessarily.

Women who report pelvic floor dysfunction or have other chronic or complex health conditions should be referred to a women's health AEP who can prescribe appropriate exercises and provide education on exercise modifications. Your exercise professional will explain how pelvic floor function may be improved to allow full resumption of all activities without symptoms of leaking, pain or pelvic heaviness.

RELATED INFORMATION AND REFERENCES

Exercise is Medicine Australia www.exerciseismedicine.org.au

Exercise Right www.exerciseright.com.au

Find an Accredited Exercise Physiologist www.essa.org.au

Australasian Menopause Society
www.menopause.org.au/about-ams

Pelvic Floor First www.pelvicfloorfirst.org.au

If you have any concerns about the safety of your patient in commencing an exercise program, please consider referral to a Sport and Exercise Physician.

Find a Sport and Exercise Physician www.acsep.org.au/

Prepared by Esme Soan (AEP, ESSAM) Women's Health Exercise Physiologist at Pear Exercise Physiology

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2. Pines, A., & Berry, E. M. (2007). Exercise in the menopause—an update. *Climacteric*, 10(sup2), 42-46.

3. Daley, A., Stokes-Lampard, H., Thomas, A., & MacArthur, C. (2014). Exercise for vasomotor menopausal symptoms. *Cochrane Database of Systematic Reviews*, (11).