

Newson Clinic Knowledge Factsheet

Can menopause increase your risk of osteoporosis?

All about menopause, osteoporosis and bone health

Your bones are made up of a type of connective tissue containing cells, collagen fibres, blood vessels and minerals such as calcium and phosphorus. These help the bone grow and repair itself.

Bone density relates to the amount, or thickness, of minerals in bone tissue and is a measure of how strong and healthy your bones are.

By your late 30s, your bone density starts to naturally decrease. This loss of bone density makes your bones weaker, less pliable and therefore more susceptible to breaking.

What's the link between bone health and menopause?

Women are more susceptible to a loss of bone strength in the years before, during, and after menopause, as oestrogen (the key hormone for protecting and maintaining bone density) rapidly declines during this time. Your bone is breaking down at a faster rate than your body can grow new bone tissue.

To build and strengthen your bones plus encourage bone repair it's important to eat a healthy, well-balanced diet and exercise regularly.

This can help reduce the risk of injury to your bones, often because of a fall, and reduce the chance of a bone break if an accident does occur.

One in three women over 50 years old will sustain a fracture to the hip, for example, and this can have serious consequences to your health. Even after the initial recovery, a hip fracture can affect your ability to carry out daily activities such as eating, dressing, washing or shopping; 40% of women who fracture their hip are not able to walk again without an aid or assistance – the physical and psychological impacts can be huge. Once a fragility fracture has occurred, patients are five times more likely to experience a second fracture within the next two years¹.

About menopause and osteoporosis: what is osteoporosis?

Osteoporosis is a condition that weakens bones, making them more fragile and prone to break. It develops slowly over several years and is often only diagnosed when a fall or sudden impact causes a bone to break.

A family history of osteoporosis means you are more susceptible to bone weakening but other factors will increase your chances of developing the condition, such as smoking, heavy drinking, low body weight and certain medications².

And while the average age of menopause in the UK is 51, about three in 100 women will go through menopause before the age of 40.

This is known as premature ovarian insufficiency (POI). Falling hormone levels earlier than the average age of menopause means younger women are at increased risk of developing osteoporosis³.

What can I do to protect my bone health during menopause?

Consider hormones

Replacing hormones with hormone replacement therapy (HRT) helps to protect the bones from weakening due to lack of oestrogen and can reduce the risk of fragility fractures^{4,5}. In fact, HRT is licensed as a treatment for osteoporosis in the UK, however many women with the condition are still not offered it as a treatment choice.

Exercise

Bones get stronger as you use them and give them work to do, and the best exercise for bone strength is combining weight-bearing exercise with impact and muscle-strengthening exercise – the Royal Osteoporosis Society has a guide on exercising for bone health.



Balanced diet - and a happy gut

A Mediterranean diet – one that's high in vegetables, nuts, beans, cereals, fish and unsaturated fats (like olive oil) and low in meat and dairy – can help maintain bone mineral density.

Be sure your diet is rich in calcium, which gives your bones the strength and hardness they need to cope with your everyday activities.

Vitamin D helps your body absorb and use calcium. You can get vitamin D from safe sunlight exposure, from your diet and from vitamin D supplements.

Also consider if you are getting enough iron, as low levels of iron have been shown to contribute to loss of bone strength in postmenopausal women, and individuals with osteoporosis are often deficient in iron.

Prebiotics

A healthy gut increases the amount of minerals helpful for bone-building being absorbed into the bloodstream.

Quit smoking

Smoking slows down the cells that build bone in your body, which can reduce your bone strength and increase your risk of breaking a bone.

Curb alcohol

In the short term, drinking a lot of alcohol can make you unsteady on your feet, making you more likely to trip, fall and break a bone.

Long term, drinking a lot of alcohol increases your risk of osteoporosis.

© Newson Health 2025

Please note that content of this website is not intended in any way to be a substitute for professional medical advice, diagnosis, or treatment. Always seek the advice of your doctor or other qualified health provider with any questions you may have regarding a medical condition. You should not disregard professional medical advice or delay in seeking it because of something you have read within our content. If you think you may have a medical emergency, speak to your doctor or contact the emergency services immediately.

References

- 1. Falchetti A., Mohseni M., Tramontana F., Napoli N. (2021), 'Secondary prevention of fragility fractures: where do we stand during the COVID-19 pandemic?' J Endocrinol Invest, Nov; 44(11):2521–2524. doi: 10.1007/s40618-021-01552-1
- 2. Royal Osteoporosis Society 'Risk factors for osteoporosis and broken bones'
- 3. Gallagher, J.C (2007), 'Effect of early menopause on bone mineral density and fractures', Menopause, vol. 14,3 pt.2, pp.567-71. doi:10.1097/gme.0b013e31804c793d
- 4. Zhu L., Jiang X., Sun Y., Shu W., (2016), 'Effect of hormone therapy on the risk of bone fractures: a systematic review and meta analysis of randomized controlled trials', Menopause, 23(4), pp. 461–70. doi: 10.1097/GME.00000000000000519
- 5. Trémollieres F. (2019), 'Assessment and hormonal management of osteoporosis', Climacteric, 22 (2), pp. 122-6, doi: 10.1080/13697137.2018.1555582