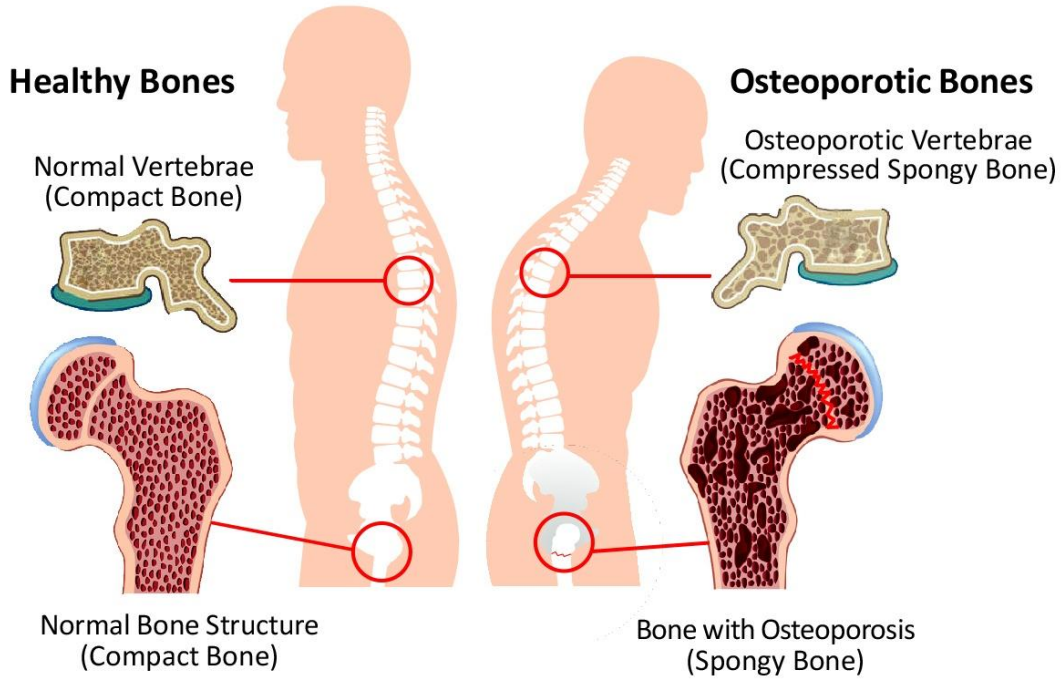
Osteoporosis



What is osteoporosis?

Osteoporosis is a **condition that weakens bones**, making them thinner and more fragile. This means bones can break more easily, sometimes after a minor fall or knock.

Osteoporosis is often called a **"silent condition"** because it usually causes no symptoms until a fracture occurs.

Who is at risk?

Osteoporosis is more common in:

- Adults over the age of 50

- Women after the menopause
- People with a family history of osteoporosis
- People who smoke or drink excess alcohol
- Those with low physical activity levels
- People with low body weight
- Long-term use of steroid medication

Common fractures

Osteoporosis-related fractures most commonly affect:

- Spine (vertebrae)
- Hip
- Wrist

Spinal fractures may cause height loss, back pain, or a stooped posture.

What causes osteoporosis?

Bones naturally become thinner with age. Osteoporosis can develop due to:

- Hormonal changes (e.g. reduced oestrogen after menopause)
- Lack of calcium and vitamin D
- Reduced weight-bearing activity
- Certain medical conditions
- Long-term steroid use

How is osteoporosis diagnosed?

Osteoporosis is usually diagnosed with:

- A **DEXA scan**, which measures bone density
- Assessment of fracture risk
- Review of medical history and risk factors

Treatment and management

Osteoporosis can be **managed effectively** to reduce fracture risk.

Medication

- Bone-strengthening medications may be prescribed
- These help slow bone loss and reduce fracture risk

Calcium and vitamin D

- Adequate calcium intake is essential
- Vitamin D helps the body absorb calcium
- Supplements may be advised

Exercise and physical activity

- Weight-bearing exercises (walking, stair climbing)
- Strength training to improve bone and muscle strength
- Balance exercises to reduce fall risk

Role of physiotherapy

Physiotherapy can help with:

- Safe strength and balance exercises
- Improving posture and spinal control
- Reducing falls risk
- Advice on safe movement and lifting

Lifestyle advice

- Stop smoking
- Limit alcohol intake
- Maintain a healthy diet
- Keep physically active
- Reduce falls risks at home

POSTMENOPAUSAL OSTEOPOROSIS

7 Activities for Hormonal Balance and Bone Strength

1 RESISTANCE TRAINING

Using bands or weights to create resistance can help strengthen muscles and bones that are more prone to fracture due to osteoporosis.

2 BRISK WALKING OR JOGGING

These weight-bearing exercises, done alone or with a weighted vest, can strengthen bones over time and regulate sex hormones.

3 WATER AEROBICS

Water-based exercises are easier on the joints than land-based ones and can reduce the risk of traumatic injuries, such as fractures.

4 MIND-BODY EXERCISES

Tai chi, yoga, and other mind-body exercises can help improve balance, muscle strength, and flexibility, which can indirectly reduce the risk of falling and fractures.

5 TENNIS OR PICKLEBALL

Racket sports are weight-bearing exercises that can strengthen muscles and improve bone mineral density.

6 DANCE

Dance is a weight-bearing and aerobic exercise that can improve body coordination and increase bone density in the spine and hips.

7 HIGH INTENSITY INTERVAL TRAINING

HIIT involves short bursts of high intensity cardio and brief recovery periods. It can improve bone mineral density and help maintain hormonal balance.

When should I seek further help?

Speak to your GP or healthcare professional if:

- You have had a fracture after a minor injury
- You have ongoing back pain or height loss
- You are concerned about bone health
- You are taking long-term steroid medication

Outlook

With the right treatment, exercise, and lifestyle changes, many people with osteoporosis maintain **good quality of life** and reduce their risk of fractures.

If you have concerns, speak to your GP, physiotherapist, or specialist for further advice.