



Osteoporosis Guidebook

*8 TIPS TO IMPROVE YOUR LONG TERM
BONE STRENGTH AND REDUCE RISK OF
FRACTURE*

www.genuinephysio.com

ABOUT GEUNINE PHYSIO

LUKE SCHEMBRI

I started Genuine Physio during COVID when people were struggling to access health care. Initially, it started as an online platform to provide free, evidenced-based resources to people, because frankly, there is a lot of misinformation out there. Since COVID Genuine Physio has grown and the goal continues to be getting positive messages about health and injury to as many people as possible.

More recently, I have started seeing a limited number of private patients one to one basis, both in person and online, whilst juggling an NHS role as an Advanced Physiotherapy Practitioner. This advanced role involves assessing and ordering scans for people, administering pain relieving injections and assessing the appropriateness of onward referrals, such as orthopaedics.

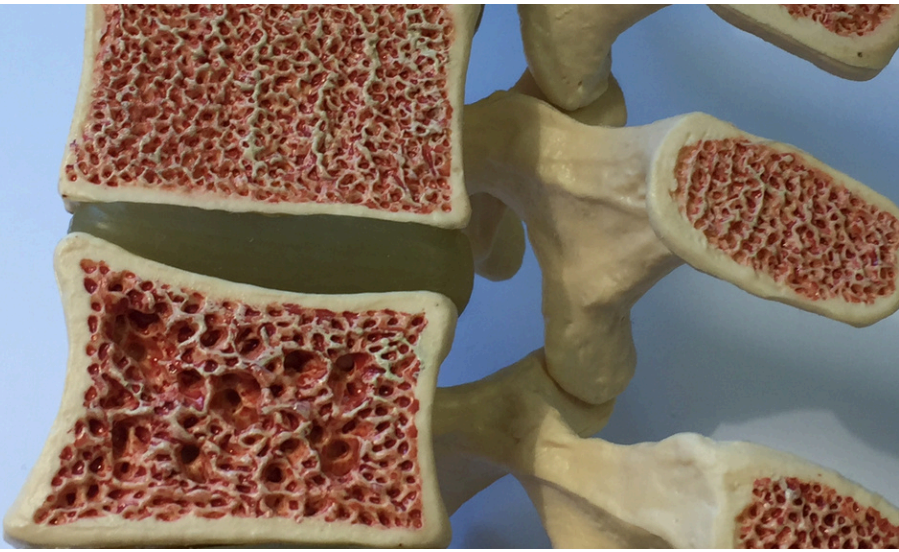
I am hugely passionate about delivering efficient, high quality, evidence based care, getting you back to the things you love and enjoy. That is what Genuine Physio is all about.

Help is at hand!



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INTRODUCTION

Welcome to your guide on osteoporosis!

As a physiotherapist, I understand how overwhelming it can be to navigate the changes your body goes through during this stage of life. Osteoporosis, often called the "silent disease," affects millions of women, weakening bones and increasing the risk of fractures. But there's good news — with the right knowledge and proactive steps, you can manage and even prevent bone loss.

In this e-book, you'll find practical advice on how to strengthen your bones, improve balance, and make lifestyle changes that support bone health. From understanding osteoporosis and its risk factors to learning about exercises, nutrition, and falls prevention, this guide offers tools that can help you live a healthier, more active life. Whether you've been diagnosed or want to prevent osteoporosis, this resource is your starting point towards stronger bones and greater confidence.



Risk Factors

Osteoporosis doesn't happen overnight — it develops gradually as bones lose density over time. Understanding the key risk factors can help you take steps to reduce your chances of developing the condition.

Age - As you age, your bones naturally decrease in density, increasing the risk of osteoporosis. Women over 50 are particularly vulnerable due to hormonal changes.

Menopause - Oestrogen plays a critical role in maintaining bone density. During menopause, the sharp decline in oestrogen levels can accelerate bone loss.

Family History - A family history of osteoporosis tends to increase your risk. If your mother or grandmother experienced hip fractures or were diagnosed with osteoporosis, you may be at a higher risk.

Lifestyle Factors - Sedentary habits, smoking, and excessive alcohol consumption can all weaken bones. In contrast, regular exercise and a nutritious diet can help protect bone health.

Low Calcium and Vitamin D Levels - Insufficient intake of calcium and vitamin D, both essential for strong bones, can contribute to bone loss.

By recognising these risk factors early, you can make informed decisions about your health and take proactive steps to protect your bones.





STRENGTH & RESISTANCE EXERCISES

Strengthening exercises are essential for maintaining bone density and preventing osteoporosis. Resistance training, in particular, builds muscle and stimulates bone growth by placing stress on the bones.

Effective exercises include:

Weightlifting: Lifting light to moderate weights, focusing on major muscle groups, such as squats, lunges, and chest presses, helps strengthen bones in the hips, spine, and wrists.

Resistance Bands: Using resistance bands for exercises like bicep curls, leg lifts, and shoulder presses targets both muscles and bones.

Bodyweight Exercises: Movements like push-ups, planks, and wall sits build strength and stability without equipment. Incorporating these exercises 2-3 times per week can significantly enhance bone strength and reduce fracture risk.



BONE LOADING EXERCISE

Bone loading exercises are highly effective for promoting bone density and preventing osteoporosis. These exercises involve putting stress on your bones through movement, which stimulates bone growth.

Open-chain exercises such as walking, jogging, and dancing help strengthen bones by forcing them to support your body weight. Higher-impact activities like jumping, hopping, and skipping increase this stress, which further promotes bone density, particularly in weight-bearing areas like the hips, spine, and legs. If you have concerns about this sort of exercise please talk to an appropriate healthcare professional first.

Incorporating bone-loading exercises into your routine 3-4 times a week helps build stronger bones, improves balance, and reduces the risk of fractures.



BALANCE & PROPRIOCEPTION EXERCISE

Balance and proprioception exercises are crucial for women with osteoporosis as they help reduce the risk of falls and fractures. Balance exercises, such as standing on one leg or practicing Tai Chi, improve stability and coordination, making daily activities safer.

Proprioception exercises—which enhance your body’s awareness of its position in space—help prevent missteps and awkward movements that could lead to falls. Strengthening the muscles around joints and improving reaction times through these exercises ensures better mobility and confidence. Regular practice enhances confidence and safety, allowing women with osteoporosis to stay active and independent longer.

These are generally easy exercise to fit into the day. Consider standing on one leg whilst brushing your teeth - make it harder by doing it with your eyes closed. Or doing the washing up in the evening on one leg. Try to make it practical!



NUTRITION & DIET

A well-balanced diet plays a vital role in preventing and managing osteoporosis by supporting bone density and overall bone health. Key nutrients that contribute to strong bones include:

Calcium: Essential for bone structure, calcium-rich foods should be a dietary priority. Women over 50 need around 1,200 mg of calcium daily. Sources include dairy products (milk, yogurt, cheese), leafy greens (kale, bok choy), fortified plant-based milk, and almonds.

Vitamin D: Vitamin D helps the body absorb calcium. Sunlight exposure is important, but dietary sources like fatty fish (salmon, mackerel), fortified foods, and supplements ensure sufficient levels. Women should aim for 600-800 IU of vitamin D daily.

Protein: Adequate protein intake is crucial for bone repair and strength. Include lean proteins like poultry, fish, beans, and legumes.

Magnesium and Vitamin K: These nutrients contribute to bone mineralisation. Incorporate foods like nuts, seeds, spinach, and broccoli.

Evidence suggests that a diet rich in these nutrients helps reduce bone loss and lowers fracture risk, making it an essential component of osteoporosis prevention and management.





MIND - BODY CONNECTION

Sleep, stress, and mental health play significant roles in bone health. Poor sleep affects bone regeneration, as the body repairs itself during rest.

Chronic stress raises cortisol levels, which can accelerate bone loss over time. Additionally, low mood and depression are linked to lower physical activity and poor self-care, both of which contribute to weaker bones.

Studies show that stress and depression may interfere with calcium absorption and bone density. Prioritising quality sleep, stress management, and mental well-being through relaxation techniques, mindfulness, meditation and physical activity can positively influence bone health and reduce osteoporosis risk.



HORMONES & MENOPAUSE

Menopause significantly increases the risk of osteoporosis due to the sharp decline in oestrogen, a hormone essential for maintaining bone density.

This hormonal drop accelerates bone loss, leading to weaker bones and a higher risk of fractures.

Hormone Replacement Therapy (HRT) can help alleviate menopausal symptoms and slow bone loss by replenishing oestrogen levels. However, HRT may not be suitable for everyone, and it carries some risks. According to NICE guidelines, women considering HRT should discuss their individual risks and benefits with their GP, who can offer tailored advice based on personal health needs and medical history.



DAILY HABITS

Incorporating osteoporosis-friendly habits into your daily routine helps protect your bones and reduce the risk of falls.

Practical exercise can be built into everyday tasks, such as taking the stairs or walking short distances. Consider setting an alarm on your phone to get up from your desk. Why not complete x 10 sit to stands before you get up and head off to the toilet? Could you get off a stop earlier on the bus or train and walk the rest of the way home? When can you include balancing on one leg during activities throughout the day?

Around the home, reduce fall risks by securing rugs, installing handrails in bathrooms if needed, and ensuring rooms are well-lit. Wearing non-slip shoes and maintaining clutter-free floors also help prevent accidents, making your home a safer environment for healthy living with osteoporosis.



PHYSIOTHERAPY & OSTEOPOROSIS

Many of the things discussed in the e-book so far can be challenging to try independently. You may be worried or scared of doing more damage and the last thing you want to do is cause an unwanted fracture. Much of the information you see online is general advice. Having some bespoke, personalised support is always a good idea.

Physiotherapy offers comprehensive support for osteoporosis by addressing many aspects of bone health. Through targeted strengthening and resistance exercises, it helps build bone density, while balance and proprioception training reduces fall risk.

Physiotherapists can guide safe, osteoporosis-friendly exercises like walking, hopping, and weight-bearing activities to stimulate bone growth but in a progressive and gradual way to avoid injury.

They also provide practical advice on daily habits, such as proper lifting techniques and making homes safer to prevent falls. In managing osteoporosis-related symptoms post-menopause, physiotherapy complements lifestyle changes like nutrition, stress management, and sleep improvement.

Overall, physiotherapy empowers women to maintain mobility, strength, and independence.



HOW CAN GENUINE PHYSIO HELP YOU?

The Free Stuff

Osteoporosis E-book: you have already found the first free osteoporosis resource I have for you and I truly hope you found it helpful.

YouTube: There are a number of 'Osteoporosis Workouts' on The YouTube Channel that you are free to follow along to. Everything from chair based exercise to workouts with dumbbells.

Fortnightly Blog: I bring out a fortnightly blog on all things over 40s health. From menopause and osteoporosis, to osteoarthritis and back pain.

Facebook, Instagram & TikTok: You'll be able to find regular posts from with with helpful exercises, tips & advice on all things over 40s health.





MORE PERSONALISED HELP

I really hope you found this e-book helpful enough to manage your osteoporosis confidently & independently.

However, if you feel like you would benefit from a more specific, bespoke treatment plan I offer both face to face and online consultations.

Whether you are worried about playing with your grandchildren, scared you could cause lasting damage or even want to try and heal an osteoporotic fracture than I am confident that we could work together to achieve your goals.

The ultimate aim is to give you the tools & strategies that you need to manage your osteoporosis, in a healthy way, long term.

Head over to the bookings page on the website where you can choose a time that suits you for us to work together. If you have any questions or queries then please don't hesitate to reach out.

I can't wait to meet you 😊

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