



Week

Six

Food for Healthy, Strong Bones

Aims

- To understand the role of diet and exercise in bone health at menopause

Menopause and Bone Health

The reduction in your levels of oestrogen at menopause reduces your bone density. This in turn increases your risk of osteoporosis. HRT helps preserve bone strength. Of course whether you take HRT or not your diet and lifestyle has a huge role in keeping your bones healthy and strong.

In 2017 the Royal College of Obstetricians and Gynaecologists guidance for the prevention and treatment of osteoporosis was reviewed. The guidance is in line with recommendations from the British Menopause Society and focusses on making sure women have enough calcium and vitamin D through diet or supplements.

You need between 700mg and 12000mg of calcium every day and if you have had a bone density scan and been told you're at risk of fracture you also need 800IU cholecalciferol (Vit D3) daily.

The table below lists the calcium content of some foods:

Calcium Source	Calcium Provided
200ml milk	240mg
30g cheddar cheese	240mg
200ml calcium fortified dairy alternative (soya milk)	240mg
60g sardines (with bones)	240mg
60g tofu	180mg
120g spinach	180mg

2 large slices white bread	120mg
220g baked beans	120mg
2 broccoli florets	60mg
30g Brazil nuts or almonds	60mg

As well as eating enough calcium rich foods or using a supplement you also need to engage in regular weight bearing exercise- another reason to aim for 10,000 steps!

What if I am dairy free?

You might choose not to eat dairy foods for a variety of reasons. If this is the case, it's very important to check that the type of non-dairy alternative you choose is calcium enriched. Calcium enrichment of soya, oat, almond, rice and coconut "milk" is not mandatory in the UK. None of these non-dairy alternatives naturally contain calcium.

If you are worried you might not consume enough calcium in your diet it is sensible to include a daily supplement providing 400-600mg calcium and 5-10ug vitamin D every day.



Movement For Strong Bones

Movement For Strong Bones

The Benefits of Exercise

We already know the immediate benefits of physical activity in midlife and menopause:

- Improved mental and physical wellbeing
- Lessening menopause symptoms
- Improved social interaction when exercising with others
- Heightened awareness of self-care - if you want to be able to deal with looking after the family, sustaining relationships, and navigating the demands of work you must look after yourself

But in this session, we're going to look at the longer-term benefits of movement in protecting bone health.

Strength Training For Stronger Bones

Movement is also an important part of the overall strategy for improving bone health. Even though we think of bones as solid structures, they're living tissue that is constantly changing. Each time we step, jump, run or balance on part of our body, the impact causes compressive force on the bone, which encourages bone building.

When we do strength training, we are training our bodies to be able to move more weight with more power. Most people will immediately think of barbells and dumbbells, but there are other ways to do strength training to get results.

Examples of muscle-strengthening activities include:

- Carrying or moving heavy loads such as groceries
- Activities that involve stepping and jumping such as dancing or running. High impact forces and a variety of movement patterns cause a stronger bone response.
- Heavy gardening, such as digging or shovelling
- Bodyweight exercises such as push-ups or sit-ups
- Lifting weights

Women going through the menopause lose bone density and muscle mass year over year, which leads to a slowing of the metabolism. This is thanks to a decline in the hormone oestrogen. Peak bone mass usually occurs by the age of 25 and then slowly declines over time, accelerating during the first several years following menopause.

As a result, strength training is one of the most important things you can do to build or maintain strong bones. Resistance-based exercise (i.e., those that incorporate some sort of weight to intensify the moves) is key to promoting healthy bones and maintaining muscle mass, which in turn can help boost a flagging metabolism by helping to burn more calories when resting, which can help manage menopausal weight gain.

During menopause, aim to build up to two to three 30-minute resistance-based workouts a week. These don't all have to incorporate actual weights; they could be bodyweight movements such as squats, lunges and push ups. Look at [Lesley's beginners'](#) and [Clara's intermediate strength classes](#) on the website.

However, adding an extra level of resistance to your workouts with, for example, a set of adjustable dumbbells, a kettlebell or a resistance band, adds a greater challenge and helps build up muscle quicker. Why not try out one of [Caroline's band workouts](#) for size?

When you start, don't be scared to ask our trainers to help you modify the workouts to set appropriate and achievable goals and techniques. You may also want to get a bone density analysis before starting any weight training, especially if you have had low-impact fractures, if you are underweight, or if there is a family history of bone density issues.

Improving Posture and Focusing On Flexibility

So much of our day is spent sitting which can tighten some muscles and put stress on the spine. Good posture can lessen or prevent back pain and protect your spine against fracture – your spine is ten times stronger when its natural curves are maintained but during the menopause, women experience decreased spinal mobility.

Of course, it's not all about how you look; good levels of strength and flexibility guarantee that you'll keep your balance more easily. To help prevent falls and protect your bones, activities that require balance are also good to practice. Many forms of dance, yoga and martial arts training (including tai chi) can promote good balance.

Many menopausal women also find that practicing yoga and Pilates has a positive impact, when it comes to maintaining supple joints. Whole body movements that focus on mobility, taking the joints through large ranges of motion are great for overall joint health. Both yoga and Pilates help promote joint health for women in menopause. And there's evidence that yoga can also help to relieve the psychological symptoms of menopause, such as irritability, depression, anxiety and sleep problems. We offer yoga classes for all abilities with our trainers Alex and Louise, or check out our restorative Pilates classes with Karen and see how you get on.