

What happens to your bones in the menopause?

In simple terms, there is two-way traffic of calcium to and from your bones, and the trick is to make sure that enough calcium remains in the bones to keep them strong. If this two-way traffic is interrupted then more calcium is taken from the bones, which will weaken your bones over time, causing conditions such as osteoporosis. This in turn will make your bones much more fragile and susceptible to fractures. It is known that low oestrogen can be a factor in the gradual weakening of bones.

Other factors that interfere with keeping your bones strong

Outdoor activities are really important to keep your vitamin D levels high from sunlight, and if you end up with low vitamin D, this can affect the bones – calcium can't absorb properly without sufficient vitamin D in the body.

Are you doing enough weight-bearing exercise? Being inactive is a big factor in poor bone health.

How's your digestion? As we age our ability to digest and absorb the important bone minerals calcium and magnesium decline, so even if you are getting plenty in your diet your body may not be utilising them properly.

How good is your diet? A diet low in fresh foods may not give you enough calcium and magnesium to support your bones.

Are you stressed? Stress burns up magnesium and also hampers our digestive processes, leading to low absorption of both calcium and magnesium.

What can you do to help keep your bones strong and healthy in the menopause?

There are a number of things you can do to keep your bones strong and healthy:

- **Diet:** diet is so important for all aspects of the menopause. Make sure that you are eating lots of calcium and magnesium rich foods such as nuts and seeds, dried fruits, dark green leafy veg and a variety of fruits. Fish such as sardines with soft bones can be beneficial and fish oils are also great for the memory, skin and joints!
- Many women ask if they should increase their dairy intake to get extra calcium. Dairy is high in calcium but very low in magnesium; you need a healthy balance of both for good, strong bones as a high calcium intake teamed with low magnesium can result in osteoporosis!
- **Check you are getting enough vitamin D – Foods rich in vitamin D include:**
 - Oily fish, including fresh tuna – but not tinned!!
 - Free range eggs
 - Shitake mushrooms
 - Oysters

Vitamin D supplements

Another way that you can actually get plenty of vitamin D is through supplements.

Always check with your doctor/medical practitioner before taking supplements

- **Exercise:** weight-bearing exercise is vital for keeping your bones strong so do make sure that you keep as active as possible. Even a brisk walk for 20-30 minutes a day will bring benefits
- **Try to keep stress at a minimum** – Easier said than done! However, stress is bad for the menopause in general and can trigger all sorts of symptoms from flushes to joint pain

Women going through the menopause should increase their intake of food sources of calcium, magnesium and vitamins D and K to maintain the integrity of the skeleton. In addition, high amounts of phosphorous – found in red meat, processed foods and fizzy drinks – should also be avoided. Too much phosphorous in the diet accelerates the loss of minerals such as calcium and magnesium from bone. Reducing sodium, caffeine and protein from animal products can also help the body maintain calcium stores.

Eat foods high in magnesium and boron. These are minerals which are important for the replacement of bone and thus help to reduce the risk of osteoporosis. Apples, pears, grapes, dates, raisins, legumes and nuts are good sources of boron.

Talk to your doctor about whether you may benefit from a calcium supplement. Other vitamins and minerals that are vital for bone health are magnesium, vitamin E, vitamin D and zinc. Weight-bearing exercise is important too, but if you have been diagnosed with any form of bone loss, check with your doctor that you can exercise safely and effectively.

Cheese and cheese-based dishes

Amount of calcium per average portion size:

- 30g parmesan cheese – 300mg
- 40g edam/gouda – 300mg
- 60g paneer cheese – 300mg
- 30g cheddar cheese/low-fat hard cheese – 200mg
- 30g halloumi – 200mg
- 80g cottage cheese – 100mg
- 40g camembert – 100mg

Dishes made with cheese also count towards your daily total, such as cheese omelettes, quiches made with cheese and egg, and dishes with cheese-based sauces like macaroni cheese or cauliflower cheese

Milk – skimmed, semi-skimmed, whole and soya

Amount of calcium per average portion size:

- 200ml milk (skimmed/semi-skimmed/whole) – 240mg
- 200ml soya milk (calcium fortified) – 240mg

Drink milk on its own or paired with low-sugar cereal or muesli. Milk-based drinks such as malted milk, hot chocolate or milkshakes also count, but be aware that the sugar in these can

be quite high. Porridge made with milk is a good breakfast option, while rice pudding is a classic milk-based dessert.

Yogurt – plain, low-fat and soya

Amount of calcium per average portion size:

- 125g yogurt (low-fat, plain and calcium-fortified soya) – 200mg
- 47g ‘mini pot’ fortified fromage frais – 50mg

Tofu – firm, soft or silken

Amount of calcium per average portion size:

- 120g tofu (steamed or fried) – 200mg

Canned fish – sardines and salmon

Amount of calcium per average portion size:

- 50g sardines (canned) – 200mg
- 105g tinned pink salmon – 100mg

Some fruit, vegetables and pulses

Amount of calcium per average portion size:

- 2 dried figs – 100mg
- 200g baked beans – 85mg
- 70g red kidney beans (canned) – 50mg
- 90g green or French beans – 50mg
- 95g green or white cabbage – 50mg
- 110g broccoli (steamed) – 50mg
- 40g watercress – 50mg
- 400g tinned tomatoes – 50mg
- 8 dried apricots – 50mg
- 1 large orange – 50mg

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Some carbohydrates – bread, pasta, rice

Amount of calcium per average portion size:

- 75g white pitta bread – 100mg
- 43g plain naan bread – 80mg
- 1 medium slice white bread – 50mg
- 1 thick slice wholemeal bread – 50mg
- 230g cooked pasta, boiled – 50mg

You might be surprised to discover that bread is fortified with calcium, so even toast can contribute towards your intake along with other calcium-rich foods.

What are the best sources of calcium for vegans or people with a dairy intolerance?

If you don't eat dairy products, you will need to include lots of other calcium-rich foods such as green leafy vegetables, almonds, sesame seeds, dried fruit, pulses, fortified soya drinks and soya protein (tofu) in your diet. A vegetarian diet is not a risk factor for osteoporosis, and vegetarians and vegans do not appear to have poorer bone health than the rest of the population.

If you are lactose intolerant, make sure you enjoy plenty of non-dairy calcium-rich foods such as pilchards, sardines, curly kale, watercress, sesame seeds and tahini (sesame seed spread). You could also choose fortified foods, such as mineral water, soya milk or bread with added calcium. Check the label on the packet to see how much calcium has been added to each portion.

A note on vitamin D

You need vitamin D to help your body absorb calcium. You can get vitamin D through sunlight exposure, from certain foods and drinks or from dietary supplements. Try to get short periods (about 10 minutes) of sun exposure to your bare skin, once or twice a day, between late March and the end of September, without sunscreen (but taking care not to burn). A UK government advisory committee has recommended that, in addition to sensible sunlight exposure, everyone over 1 year of age should get 10 micrograms (10 µg) of vitamin D every day (8.5-10 micrograms for all infants under 1 year). **Talk to your doctor** if you are concerned that you aren't getting enough vitamin D or if you are considering taking a supplement.