

Healthy living for strong bones

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Keeping your bones healthy

Your bones change throughout your life.

It's never too early or too late to start looking after your bones. A healthy, balanced diet and regular exercise can help keep your bones strong at every stage of your life. Keeping your bones strong helps reduce the chance of osteoporosis and broken bones (fractures).

Healthy eating for your bones

Eating a healthy, balanced diet can help you get all the nutrients you need for your bones.

Try to eat meals that have foods from the four main food groups. These are:

- fruit and vegetables
- carbohydrates, like bread, potatoes, pasta and cereals
- dairy and alternatives, like milk and cheese
- protein, like beans, eggs, fish and meat.

Try to cut down on caffeine, sugary drinks and salt.

For more information about these food groups and how much of each you need, visit [**theros.org.uk/nutrition**](https://theros.org.uk/nutrition)

Calcium and vitamin D are just two nutrients that are important for bone health.

What is osteoporosis?

Osteoporosis is a condition where your bones lose strength, making you more likely to break a bone.

Anyone can have osteoporosis. It's most common in older people, especially women who have been through the menopause. But men, younger people, children and pregnant women can also have osteoporosis.

There are medicines to help strengthen your bones if you have osteoporosis. A healthy, balanced diet and exercise is also important.

"I think it's important, especially for younger people to be aware of osteoporosis. We can do things to help strengthen our bones and reduce the chance of osteoporosis, just by making a few small changes to our lives."

Ed, 25

Calcium

Calcium is important because it gives your bones the strength and hardness they need to cope with everyday activities.

There are plenty of foods that are rich in calcium, including:

- dairy products, like milk, cheese and yoghurt
- leafy green vegetables, like broccoli, cabbage and watercress
- fruit, like oranges, satsumas and dried figs
- carbohydrates, like white pitta bread, pasta and rice
- fish, like sardines and mackerel.

Many dairy-free and meat-free products such as calcium-set tofu and plant-based milk are fortified with calcium. This means calcium has been added to the food. Check the label to find out how much calcium has been added.

You can usually get all the calcium you need for your bones from your food, without taking a supplement.

Visit theros.org.uk/calcium-chooser or order your free copy of '**Better bone health for everybody**' to find more calcium-rich foods in our food chooser.

How much calcium do I need?

Calcium is measured in milligrams (mg).

Most adults need **700mg** of calcium a day, including if you're pregnant.

If you have a balanced diet, you're likely to get all the calcium you need. For example, you would get around 700mg of calcium if as part of a balanced diet, you ate:

- two slices of bread
- two slices of cheese
- a handful of green beans
- an orange
- a glass of calcium-fortified soya milk.

If you're breast-feeding, you should increase your intake to 1,250mg a day.

There are some health conditions where your doctor may advise you to have less or more calcium. Talk to your doctor if you're unsure how much calcium you should have.

Did you know?

If you're at risk of osteoporosis or taking an osteoporosis medicine, your doctor may advise you to increase your intake to around 1,000mg of calcium a day. This is to make sure you're getting enough for your bones.

Vitamin D

Vitamin D is important because it helps your body absorb and use calcium. It also helps to keep your muscles strong.

You can get vitamin D from sunlight, supplements and food.

The sun's rays react with your skin to make vitamin D. In the UK, your skin can only make vitamin D from sunlight between the beginning of April and the end of September. This may vary depending on where you live.

During this time, you should expose your skin, without sunscreen, to direct sunlight. This should only be for around 10 minutes, once or twice a day. Take care not to burn. You only need to expose the skin on your face and arms.

You can usually get all the vitamin D you need for your bones from sunlight in the summer. But everyone should consider taking a daily supplement from the end of September to the beginning of April. This is because we can't make vitamin D from the sun in the winter.

A vitamin D supplement is recommended all year round if you:

- don't spend much time outside
- cover up most of your skin when you go outside
- use sunscreen most of the time.

It may be helpful to have a vitamin D supplement all year round if you:

- have dark skin
- are pregnant or breast-feeding.

How much vitamin D do I need?

Vitamin D in food and supplements is measured in micrograms (µg) or international units (IU).

1 microgram of vitamin D is the same as 40 IU.

Most adults need **10 micrograms** of vitamin D a day.

Some foods contain a small amount of vitamin D. But it's difficult to get enough vitamin D from food alone. Foods containing vitamin D include:

- oily fish, like herring, salmon and mackerel
- eggs
- pork products, like sausages, bacon and pork chops.

It's important to enjoy these foods in moderation and as part of a healthy, balanced diet.

Some foods such as certain breakfast cereals, bread and yoghurt are fortified with vitamin D. This means vitamin D has been added to the food. Check the label to find out how much vitamin D has been added.

Did you know?

If you're at risk of osteoporosis or taking an osteoporosis medicine, your doctor may advise you to take a daily 20 microgram supplement of vitamin D. This is to make sure you're getting enough for your bones.

Visit [**theros.org.uk/vitamin-d**](https://theros.org.uk/vitamin-d) or order your free copy of '**Better bone health for everybody**' for more information about vitamin D.

"Since being diagnosed with osteoporosis, I make every effort to eat plenty of calcium in my diet and take a vitamin D supplement in the winter months. I've tried to reduce the amount of alcohol I drink too. I seek out bone-strengthening, muscle-developing and balance exercises... I particularly enjoy aerobics, Pilates, and going for walks."
Volunteer, Royal Osteoporosis Society

Alcohol and smoking

Drinking more than the recommended levels of alcohol and smoking can harm your bones. This means they increase your chance of osteoporosis and broken bones.

Men and women should have no more than 14 units of alcohol a week. This should be spread over 3 or more days.

14 units is the same as:

- 6 pints of average-strength beer, or
- 10 small (125ml) glasses of lower-strength wine, or
- 14 small (25ml) shots of spirits.

There is support available if you're worried you're drinking too much alcohol or want to stop smoking. Speak to your GP for more information.

Visit [**theros.org.uk/nutrition**](https://theros.org.uk/nutrition) to find out more about healthy habits for your bones.

Exercise for bones

Exercise can help keep your bones and muscles strong. It can also help your balance so you're less likely to fall over and break a bone.

Exercise for strong bones

Bones get stronger when you use them. The best way to help your bone strength is to do weight-bearing impact and muscle-strengthening exercise.

Weight-bearing impact exercise involves being on your feet and adding an extra force or controlled jolt through your bones. Dancing, jogging, brisk walking and tennis are examples of this.

Muscle-strengthening exercise involves moving your muscles against resistance to make them stronger. Resistance comes from your own body weight, a resistance band or weight.

Exercise for balance and muscle strength

It's important to have good balance and coordination. This is because slips, trips and falls can lead to broken bones. If you're unsteady on your feet, there are some activities you can do to help like dance, yoga, Tai Chi and Pilates.

Did you know?

Exercise is unlikely to cause a broken bone. But if you have osteoporosis, you may need to adapt some exercises to be on the safe side – especially if you have spinal fractures or many broken bones.

How much exercise do I need to do?

It's important to do exercise you enjoy and is at a level that's right for you.

The Government has published guidelines on their recommendations for exercise, based on age:

- **adults (under 65)** should do 150 minutes of moderate-intensity physical activity every week. For example, this could be 30 minutes spread over 5 days. You should also do muscle-strengthening exercise at least 2 days a week.
- **older adults (over 65)** should do the same amount of moderate-intensity activity as those under 65. You should also exercise to improve your balance at least 2 days a week and avoid sitting for a long time.

Moderate-intensity activity means getting warm and your heart rate up so you get slightly out of breath.

Visit theros.org.uk/exercise for more information about how to exercise safely for your bones, including our fact sheets and films.

My healthy bones guide

Use this space to make notes with your healthcare professional.

Calcium and vitamin D

My doctor has recommended I have _____ mg of calcium a day.

I'll achieve this by:

My doctor has recommended I have _____ micrograms of vitamin D a day.

I'll achieve this by:

Personal goals

Weight-bearing impact exercise:

Muscle-strengthening exercise:

Alcohol and smoking:

Notes

Getting more information and support

About the Royal Osteoporosis Society

We're the Royal Osteoporosis Society – the UK's largest national charity dedicated to improving bone health and beating osteoporosis. And we're here for everyone. We equip people with practical information and support to take action on their bone health.

About our health information

Our health information is written by our health information team and is reviewed by healthcare professionals and people living with osteoporosis. We make every reasonable effort to ensure the content is accurate and up-to-date.

Order your free copy of our booklet '**Better bone health for everybody**' for more information about healthy living for strong bones. You can also order free copies of our booklets about osteoporosis and spinal fractures. Call **01761 471771** or email [**info@theros.org.uk**](mailto:info@theros.org.uk)

For more information about healthy living, including our films and fact sheets on calcium, vitamin D and exercise for bones, visit [**theros.org.uk/info**](https://theros.org.uk/info) or call **01761 471771** to order copies of our fact sheets.

Support for you

Our specialist Helpline nurses are here to answer your questions or concerns about bone health or living with osteoporosis. You can call, for free, on **0808 800 0035** or email them at [**nurses@theros.org.uk**](mailto:nurses@theros.org.uk)

Become a member of ROS and gain access to guidance and support from bone health experts and all the latest information on osteoporosis. Join today at [**theros.org.uk/membership**](https://theros.org.uk/membership) or call **01761 473287**

Hear from leading experts in osteoporosis and bone health in our #BoneMatters online sessions. Visit [**theros.org.uk/bone-matters**](https://theros.org.uk/bone-matters)

Find information and support to help you manage the emotional impact of osteoporosis and broken bones at [**theros.org.uk/emotional-wellbeing**](https://theros.org.uk/emotional-wellbeing)

How you can help

As an independent charity, we don't receive any government funding. So we can only continue to provide our services through the generosity of our supporters.

We would appreciate any donation you're able to give to support our work. If you'd like to donate, visit [**theros.org.uk/donate**](https://theros.org.uk/donate) or call **01761 473287**

Your donation will help us to support more people with osteoporosis.

"The Helpline nurses were so helpful. They pointed me in the right direction and it's so reassuring to know they're there if I ever need support in the future."
Annette, 65

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