

*Menopause and diet:***Calcium and postmenopausal osteoporosis**

Calcium plays a key role in bone health. Maintaining an adequate calcium intake is important throughout life, from childhood to postmenopause.

Calcium and diet

- The main source of dietary calcium is **dairy products**
- Lactose intolerance, celiac disease and bariatric surgery affect **absorption**
- For women aged over 50, the **daily dietary allowance** (RDA) recommended by the US National Institutes of Health (NIH) is 1200 mg
- The UK Royal Osteoporosis Society (ROS) recommends 700 mg daily, increasing to 1000 mg in those taking osteoporosis medication
- The Women's Health Initiative (WHI) study found an increased risk of renal stones in women taking **calcium supplements** and so they should be taken only when there is inadequate dietary intake

Recommended dietary intakes vary throughout life, and higher intakes are recommended during times of bone formation and by older people, up to 1000–1300 mg of calcium per day.

Calcium-rich foods

- Dairy products (milk and cheese)
- Green leafy vegetables
- Canned whole fish with soft, edible bones such as sardines
- Nuts (almonds in particular)
- Seeds (sesame seeds in particular)
- Dried fruit
- Pulses/legumes
- Tofu
- Calcium-fortified cereals and bread

Calcium and osteoporosis

- An adequate intake of calcium is a mainstay in the prevention of postmenopausal **osteoporosis**
- It is important to get an **assessment**, even if only approximate, of the individual's intake of calcium
- **Supplements** may be recommended where levels seem to be insufficient
- Women should be warned that calcium intakes above the recommended levels may be useless, or may even entail harm, though this remains uncertain

Further information

EMAS (2025). CareOnline. Health at menopause and beyond <https://emas-online.org/guidelines-and-education/#emas-care-online>

International Osteoporosis Foundation <https://www.osteoporosis.foundation/educational-hub/topic/calcium>

British Menopause Society (2025). Prevention and treatment of osteoporosis in postmenopausal women <https://thebms.org.uk/wp-content/uploads/2023/10/06-BMS-ConsensusStatement-PRevention-and-treatment-of-osteoporosis-in-women-SEPT2023.A.pdf>

Royal Osteoporosis Society <https://theros.org.uk/information-and-support/bone-health/nutrition-for-bones/calcium>