

PATIENT INFORMATION

# ALZHEIMER'S DISEASE, DEMENTIA & BONE HEALTH

WorldOsteoporosisDay  
October 20

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BONES

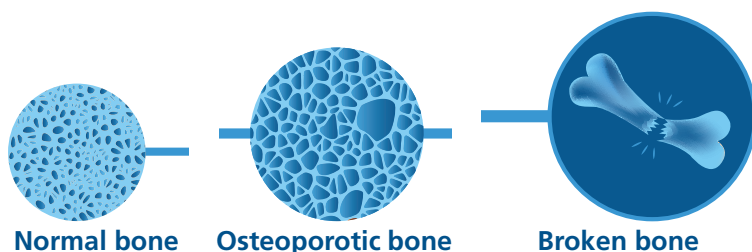
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# WHAT IS OSTEOPOROSIS ?

Osteoporosis is a condition in which bones become thinner and more fragile, making them more likely to break (fracture).

People suffering from dementia are at considerably higher risk of sustaining a hip fracture. However, compared to cognitively intact older adults, they are often under-assessed for falls risk and less likely to receive osteoporosis treatment. Anyone caring for a person with dementia should be aware of this heightened risk and ensure that appropriate measures to protect against potential falls and fractures are taken.



## WHAT IS ALZHEIMER'S DISEASE?

## WHY ARE PEOPLE WITH ALZHEIMER'S DISEASE & DEMENTIA AT INCREASED RISK OF FRACTURE?

Alzheimer's is the most common form of dementia, a general term for memory loss and other cognitive abilities serious enough to interfere with daily life. Symptoms usually develop slowly and get worse over time, becoming severe enough to interfere with daily tasks. Alzheimer's disease accounts for 60 to 80 percent of dementia cases.

People suffering from dementia are up to three times more likely than a cognitively intact older adult to sustain a hip fracture. They are less likely to recover their previous functional status following a hip fracture, and are more likely to require institutionalisation. In addition:

- Although persons with dementia suffer more falls, more fractures and higher post-fracture mortality than those without dementia, they are under-assessed for falls risk factors and are less likely to receive treatment for osteoporosis.
- Falls and fracture patients have a high prevalence of dementia and cognitive impairment, yet do not routinely receive cognitive assessment and, consequently, frequently miss an opportunity for a diagnosis of dementia to be made.
- Low body mass index (BMI), weight loss, decreased muscle mass, nutritional deficiencies and sideways direction of falling may be more common in patients with Alzheimer's and may explain the increased risk of hip fracture.

## STRATEGIES TO PROTECT BONE HEALTH IN PEOPLE WITH DEMENTIA

Anyone caring for people with dementia should be aware of key strategies to help prevent and treat osteoporosis and reduce falls risk:

### ASK FOR A BONE HEALTH STATUS ASSESSMENT

Ensure that a doctor conducts a bone health assessment which will likely include a risk assessment (e.g. FRAX) and, depending on an individual's age or level of risk, a DXA (Dual-energy X-ray Absorptiometry) scan to measure bone mineral density. As well as dementia, there may be other risk factors (for example a prior fracture, or a family history of osteoporosis) that further increases the risk of osteoporosis and fractures.

### MAINTAIN A HEALTHY BALANCED DIET AND NORMAL BODY WEIGHT

A healthy, balanced diet should include sufficient protein and plenty of fruits and vegetables. This will help ensure an adequate intake of the many different micronutrients that also contribute to bone health. Maintaining a normal body weight is important. Both obesity and, in particular, being underweight, have a negative impact on bone as well as on falls and fracture risk.

### ENCOURAGE INDIVIDUALS TO BE PHYSICALLY ACTIVE

Regular weight-bearing and muscle-strengthening exercise, such as walking, climbing stairs, and weight training, benefits bone health. If possible, thirty minutes of exercise per day is recommended.

### SECURE SUFFICIENT VITAMIN D

Vitamin D is needed to absorb calcium. Most of our vitamin D is obtained by exposure of the skin to sunlight. Only a small group of foods (e.g. oily fish, egg yolks, liver) are naturally rich in vitamin D, and, in some countries, margarine, milk and breakfast cereals are fortified with vitamin D. A healthcare provider may need to prescribe additional supplements to ensure sufficient vitamin D intake. The International Osteoporosis Foundation recommends that seniors aged 60 years and over take a vitamin D supplement at a dose of 800–1000 IU/day. Vitamin D supplementation at these levels has been shown to reduce the risk of falls and fractures.

### PREVENT FALLS

If bones are weak fractures can occur after minor slips or falls from standing height. In patients with Alzheimer's several additional factors increase the risk of falls, including: medications, poor gait, wandering, and agitation. Awareness of these risks, and taking measures to make home or institutional environments falls proof, are essential. These include adequate lighting, grab bars in bathrooms, handrails, and wearing slip-proof shoes, among other measures.

### ENSURE A HEALTHY DIET RICH IN CALCIUM

Women aged 19 to 50 should aim for 1,000 milligrams (mg) of calcium per day, and women older than 50 should increase intake to around 1,200 to 1,500 mg per day. By ensuring that people with dementia consume calcium-rich foods, these targets should be attainable. However, if diet alone does not provide the recommended intake, a doctor may need to prescribe a calcium supplement.

### ADHERENCE TO MEDICATION IF PRESCRIBED

Depending on the results of the bone health assessment – which will determine how weak a person's bones are and how high the fracture risk is – a doctor may recommend drug treatment to protect bones against fractures. There are a number of different effective treatments which can considerably reduce the risk of suffering a fracture.

### AVOIDING SMOKING AND EXCESSIVE ALCOHOL INTAKE

There is a link between bone loss and both cigarette smoking and excessive alcohol intake. Quitting smoking can reduce the risk of osteoporosis. Limiting alcohol intake to no more than two units per day is also beneficial.

The IOF vision is a world without fragility fracture  
in which healthy mobility is a reality for all.

*Show your support, sign the IOF Global Patient Charter at*

**[www.iofglobalpatientcharter.org](http://www.iofglobalpatientcharter.org)**

#### **About IOF**

The International Osteoporosis Foundation (IOF) is the world's largest nongovernmental organization dedicated to the prevention, diagnosis and treatment of osteoporosis and related musculoskeletal diseases. IOF members, including committees of scientific researchers as well as 240 patient, medical and research societies in 99 locations, work together to make fracture prevention and healthy mobility a worldwide health care priority.

<http://www.iofbonehealth.org> <http://www.facebook.com/iofbonehealth> @iofbonehealth

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