

Preventing falls in older adults – Vitamin D

It's well known that the risk of falling increases with age. International research shows the risk of falling is highest in residential care facilities, where at least two thirds of residents fall each year. Residents are more likely to injure themselves in a fall due to reduced bone quality and increased frailty.

Low Vitamin D levels are common in the majority of older adults in residential care facilities and in certain population groups within the community. Low levels of Vitamin D can lead to:

- Muscle weakness and atrophy (particularly in fast-twitch muscle fibres)
- An increase in postural sway
- Impaired psychomotor function
- Increased bone turnover which leads to osteoporosis.

A recent meta-analysis showed that Vitamin D supplements reduced the risk of falling in older adults in residential care by approximately 28 percent and subsequently reduced the risk of fracture and hospital admission. This could lead to a significant reduction in personal injury and suffering, as well as reducing pressure on facility staff, other health professionals and the healthcare system.

Vitamin D programme

ACC, District Health Boards and Primary Health Organisations across the country are encouraging the provision of Vitamin D supplements to older adults (aged 65 and over) in residential care facilities.

A prescribing criteria has been developed by Professor John Campbell, Associate Professor Ngaire Kerse, Professor Ian Reid, Associate Professor Robert Scragg, Laird Madison and ACC. The criteria for residential care are outlined below:

Prescribing criteria for residential care	
Prescribing inclusion criteria	Living in a long-term residential care facility
Prescribing exclusion criteria	Those currently on Vitamin D preparations or those with known hypercalcaemia.
Dosage	Loading dose of 2 x 50,000IU ¹ Vitamin D ₃ ² in first month Maintenance dose of 50,000IU Vitamin D ₃ per month thereafter for life
Note	There is no requirement to measure Vitamin D levels prior to or during treatment.

1. 50,000IU or 1.25mg

2. Vitamin D₃- Cholecalciferol or Calciferol

The Programme is currently running and is being well supported by District Health Boards and residential care facilities throughout the country.

Your role – how pharmacists can help

ACC and the health sector are working with GPs and residential care providers to increase the uptake of Vitamin D. Pharmacists can play an influential role in this programme by:

- Alerting residential care facilities you provide pharmaceutical services to about the Vitamin D Programme
- During your visits to residential care facilities, helping to identify residents who may be suitable for supplementation (in line with the Prescribing Criteria)
- Supporting the residential care facility’s doctors to prescribe Vitamin D for suitable residents
- Dispensing Vitamin D, when prescribed, for suitable residents
- Continuously monitoring and recommending Vitamin D prescribing for suitable residents
- Talking to local doctors about prescribing Vitamin D for those older adults who are not in residential care but may be frail, have a chronic condition or limited mobility.

Find out more – ACC contacts

Area	Contact person	Email address	Phone number
National	Tony Roddan	Tony.rodan@acc.co.nz	(04) 816-5418
Northland	Sue Bodle	Sue.bodle@acc.co.nz	(09) 437-9520
Counties Manukau	Sherine Amarasekera	Sherine.amarasekera@acc.co.nz	(09) 915-8181
Auckland	Sherine Amarasekera	Sherine.amarasekera@acc.co.nz	(09) 915-8181
Waitemata	Anjina Raman	Anjina.raman@acc.co.nz	(09) 915-8378
Hawke’s Bay	Sally Phelps	Sally.phelps@acc.co.nz	(06) 873-0267
Waikato, Lakes and BOP	Patricia Heydon	Patricia.heydon@acc.co.nz	(07) 306-0102
Taranaki	Kath Forde	Kath.forde@acc.co.nz	(06) 759-0730
MidCentral	Michael Morris	Michael.morris@acc.co.nz	(06) 952-5256
Hutt Valley	Barry Hislop	Barry.hislop@acc.co.nz	(04) 494-5092
Wairarapa	Laura Muller	Laura.muller@acc.co.nz	(06) 370-0115
Capital and Coast	Barry Hislop	Barry.hislop@acc.co.nz	(04) 918-4092
West Coast	Cathy Blincoe	Cathy.blincoe@acc.co.nz	(03) 769-9118
Otago	Andy Redfearn	Andrew.redfearn@acc.co.nz	(03) 479-6931
Southland	Nic Miller	Nicola.miller@acc.co.nz	(03) 211-0210
Nelson	Mark Preston-Thomas	Mark.preston-thomas@acc.co.nz	(03) 545-7811
Marlborough	Grenville Robinson	Grenville.robinson@acc.co.nz	(03) 520-9120

Visit www.acc.co.nz/vitamin-d for additional information