

Sunlight and supplements

Vitamin D is vitally important to health and wellbeing but many residents are not getting enough, writes SANDY CHEU.



The link between vitamin D deficiency and an increased risk of falls and fractures among aged care residents is well-known, but evidence indicates that action to improve vitamin D intake is lacking.

Vitamin D plays a vital role in the body for all humans, but many aged care residents are not receiving enough of it to reduce falls, says Professor Ian Cameron, lead investigator at the Cognitive Decline Partnership Centre at the University of Sydney.

“The big issue is that older people living in residential aged care facilities fall a lot and often sustain serious injuries, particularly hip fractures and brain injuries,” Cameron tells *Australian Ageing Agenda*.

“Vitamin D has quite an important role in your body in lots of ways. For older people, they need adequate amounts of vitamin D to absorb calcium effectively to get stronger bones,” says Cameron, a professor of rehabilitation medicine.

“There is also some evidence that vitamin D has an effect on the muscular system and that very low levels of vitamin D is associated with muscle weakness.”

The best source of vitamin D for aged care residents is exposure to sunlight, says Cameron.

“Ideally, people get sufficient vitamin D by being out in the sun, so sunlight is the main way humans get vitamin D. The difficulty is that in theory people in residential aged care can get out in the sun, but the reality is they don’t,” he says.

Cameron undertook a study in 2012 involving 602 residents aged 70 and over from 51 facilities in Sydney that aimed to increase residents’ exposure to sunlight. It found some facilities were able to get residents out in the sun more, but often it wasn’t possible.

“The resident was sick or there wasn’t a staff member to take the person outside, for example. Trying to get people out in the sun didn’t work on average,” Cameron says.

The amount of sunlight needed to ensure an adequate intake of vitamin D depends on where a person is – the latitude – and the season.

“If we are thinking of Sydney in the middle of summer, you probably only need 10 minutes or so with your arms and legs and some of your head and face uncovered. In winter, you need substantially more than that – at least half an hour and



Ian Cameron

probably more if you live in Hobart... If you live in Darwin, you need much less,” he says.

While sunlight is the main source of vitamin D, it is not always encouraged because many people are concerned about the risk of skin cancer, says Cameron. Certain foods can also increase vitamin D levels, however it is difficult to get enough vitamin D through diet alone, he says.

Taking supplements is most practical way for residents to maintain adequate levels of vitamin D, Cameron says. In a recent study, Cameron found the use of vitamin D supplements in residential aged care substantially lower than optimal.

He investigated how many residents received the best-practice guideline recommendation of at least 800 international units of vitamin D per day. The study included 1,592 residents from 21 facilities in three states and Cameron found that just 47 per cent of participants were prescribed this recommended dose.

However, Cameron says the optimal amount for people living in residential aged care is more than this.

“The generally accepted amount of vitamin D would be 1,000 international units per day for people living in residential aged care facilities,” he says.

More recently Cameron undertook research on strategies to increase supplement uptake among residents. Reasons vitamin D supplement use is lacking in aged care include misperceptions, a lack of awareness and cost, he says.

“Even though anyone can buy it at the supermarket, it’s generally seen [by the industry] as it has to be prescribed medication but it was hard to get it prescribed [by doctors]. There were multiple barriers including not being seen as an issue by some residential aged care facilities,” Cameron says.

“While it’s very cheap medication, once you add the dispensing fees, cost was an issue for some people and it was hard to engage with general practitioners to get it on their prescription list,” he says.

Cameron wants aged care providers and people working with in the sector to recognise vitamin D as an issue for residents so that it becomes recommended and more widely used.

“Be aware of the issues, talk to residents and families about why it is worthwhile to have sufficient vitamin D and then work with GPs to see that it is prescribed,” Cameron says. ■