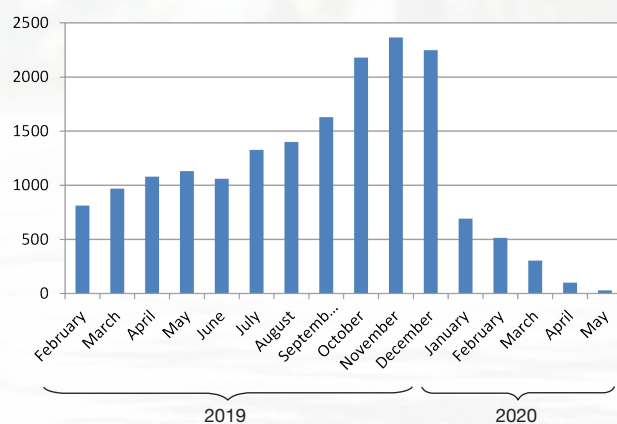


Almost finished

Thank you for sticking with us for the long haul. The light at the end of the D-Health tunnel is rapidly growing brighter! About a third of you have already received your final batch of tablets so you have less than a year until we send you your final survey. We recruited about nine-tenths of all participants in 2014 so most people will finish their 5 years in the trial in 2019. The figure shows the number of people due to finish each month. When the last participants have finished we will be able to tell you whether you have been taking vitamin D or placebo tablets.

We have posted over 90,000 packs of tablets since the study began – we will certainly be excited when the last pack is posted in May 2019.



Number of participants due to take their last tablet each month



Data analysis begins

We have now begun formal data analysis, supported by some enthusiastic students.

Hai Pham (PhD student) is analysing the effect of taking a vitamin D supplement on the rate of infections. To do this she is using the following data sources:

1. Your responses to the questions we ask in annual surveys about whether or not you have had a cold or the flu in the previous month
2. Information from the cold and flu diaries that we have asked some randomly selected people to complete
3. Data about antibiotic use that we have obtained from the Pharmaceutical Benefits Scheme (for those people who gave specific consent).

Aninda Rahman (Masters of Epidemiology student) is working out whether taking a vitamin D supplement influences bodily pain. In our first and second annual surveys we asked a series of questions about pain.

We combine the responses to these questions to form a score.

Aninda will see if the average score differs between the two groups in the trial (vitamin D and placebo). He will also investigate whether taking a vitamin D supplement influences the pain some

people experience when they take a drug to lower their cholesterol.

Emma Sanguinetti (Masters of Epidemiology student) is investigating the effect of vitamin D supplementation on falls. Each year we ask you to report whether or not you have fallen in the last month. Emma will determine whether the proportion of people who fell differs between the vitamin D and placebo groups. She will also use the data from the 'falls diaries' (completed by a subgroup of participants) to explore the effect of vitamin D on falls in more detail.

Later this year or early next year we hope to be able to give you some preliminary results – making sure the analysis is correct takes a long time, particularly when our students still have a lot to learn.



Hai, Emma and Aninda

Measuring health outcomes in subgroups of D-Health participants

We would like to say a very heartfelt thank you to those of you who have agreed to do extra work for us. We obtain information about your health from the surveys we send you and from data we obtain from hospitals and health registers (eg cancer registers). However, there are some health outcomes that we want to explore in more detail. To do this we have asked smaller groups to take part in some extra studies. These are:



The Memory Study: 3888 people took part in a telephone interview in which we asked a series of questions. The answers are combined to calculate a memory score – we will compare the average score between the two groups. We will ask those same people to complete the interview again just before they take their last tablet so we can examine change over time.



The Falls Study: 1974 people have kept a FALLS DIARY for three months to document each time they had a fall. For each fall we have asked about any injuries that occurred.



The Cold and Flu Study: 1391 people kept a diary in winter / early spring for 8 weeks. Each day they recorded whether they had had any symptoms of cold or flu such as a runny nose or sore throat. The data captured through the diary will enable us to investigate whether vitamin D affects whether people get a cold and also how severe it is and how long it lasts.

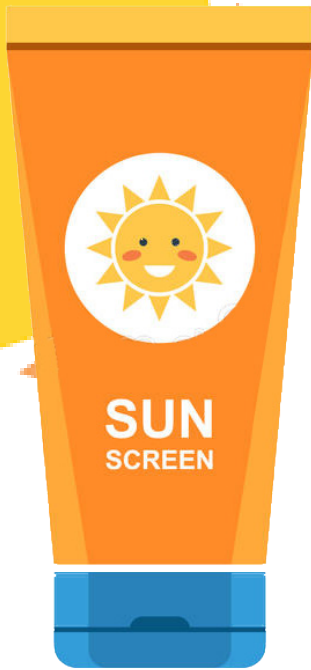


Telomere length: Telomeres are caps that protect the ends of chromosomes (where our genes are housed) and they get shorter as we age. This is part of what causes the ageing of our bodies. Vitamin D might offer some protection to our telomeres. We will use blood samples from ~4000 people to investigate this.



Microbiome Study: There is emerging evidence to suggest that the types of bacteria and other microorganisms that live in our gut can influence many different health outcomes. Studies performed in mice, and some small human studies, suggest that vitamin D might influence the composition of the bugs. To test this we have invited about 140 D-Health participants to provide us with a stool sample. We hope to obtain additional funding to be able to test more people, but even with ~100 people we will have the largest human trial that has explored this hypothesis.

Sunscreen and vitamin D



Associate Professor Rachel Neale recently helped to organize a national meeting of scientists and policy makers to consider whether the health promotion messages about sunscreen should be modified. During the meeting, Rachel presented the results of a systematic review of the literature to investigate whether regular sunscreen application can cause vitamin D deficiency. Results in laboratory studies suggest that applying sunscreen reduces the amount of vitamin D produced in the skin, but it does not completely block production. The two randomised trials that investigated this found that the average vitamin D level in people assigned to use daily sunscreen was the same as in people who did not apply sunscreen every day.^{1,2} This suggests that when the maximum UV index is forecast to reach 3 or greater, you can make sunscreen application part of your morning routine without needing to worry about the effect on your vitamin D level.

1. Jayaratne et al, Preventive Medicine 2012; 55: 146-150

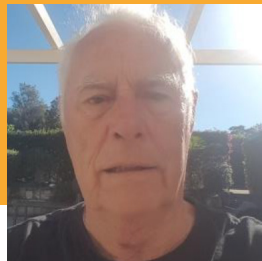
2. Marks et al, Arch Dermatol 1995; 131: 415-421

Coles Myer voucher winners

As you may recall, each year of the trial we are randomly selecting six participants to win a Coles Myer voucher. Four of our lucky winners this year are:



Geoffrey Kidd
NSW



Ralph Reid
WA



John Oakes (and wife)
SA



Sharon Quick
VIC

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