



A study of Sunscreen and Vitamin D

HAVE YOU EVER WONDERED IF USING SUNSCREEN AFFECTS YOUR VITAMIN D?

BALANCING THE RISKS AND BENEFITS OF SUN EXPOSURE IS CHALLENGING

Most skin cancers are caused by exposing our skin to the sun.

Australia has the highest rate of skin cancer in the world. Every year about 16,000 people are diagnosed with melanoma, and around 1,400 people die. We spend nearly a billion dollars managing skin cancer each year.



Exposing our skin to the sun also generates vitamin D.

Vitamin D is called the 'sunshine vitamin'. It is essential for bone health and may have other benefits. Estimates suggest that in some parts of Australia many people are vitamin D deficient.

Regular sunscreen application reduces the risk of skin cancer, but it may also reduce vitamin D production.

In theory, wearing sunscreen could cause vitamin D deficiency. Studies suggest that putting on low SPF sunscreen does not cause vitamin D deficiency, but we do not know if regularly applying SPF 50+ sunscreen affects vitamin D.

The Sun-D Trial is the first large trial to investigate the effect of applying SPF 50+ sunscreen on vitamin D.

We are looking for people aged between 18 and 70 years to take part in this one-year study, which will investigate whether putting on a high SPF sunscreen every day leads to lower vitamin D.

WE WOULD LIKE TO HEAR FROM YOU IF YOU:

- Are aged between 18 and 70 years;
- Live in one of the four eastern states of Australia (QLD, NSW, VIC & TAS);
- Have fair or olive skin;
- Do not wear sunscreen regularly (You can take part if you are using a low SPF moisturiser or makeup on your face);
- Are not taking more than 400 IU of vitamin D in supplements each day.

WHAT WILL YOU HAVE TO DO?

Half of the participants in the Sun-D Trial (decided randomly) will be given sunscreen to apply every day for most of one year. The other half will continue with their usual sun protection behaviour.

All participants will have to:

- Complete **short online surveys** each month for one year; AND
- **Provide a blood sample** so we can measure vitamin D (just like having a regular blood test) 3 times in the year.

ARE YOU INTERESTED IN TAKING PART IN THE SUN-D TRIAL?

If you still have questions or would like to register your interest. You can:



Scan the QR code or go to:
www.qimrberghofer.edu.au/sund/



OR call 1300 735 920



OR email:
SunD@qimrberghofer.edu.au

FREQUENTLY ASKED QUESTIONS

ARE THERE BENEFITS OF TAKING PART?

- To say thank you for your time, we will give you a **\$50 e-voucher for each of the three blood samples** returned to us - \$150 in total if you return all three samples.
- You will **find out how your vitamin D levels change across a whole year**. At the end of the Sun-D Trial we will tell you your vitamin D results.
- Half of the Sun-D participants will receive **free sunscreen** for a year.

The greatest benefit is knowing that you are taking part in medical research that will help Australians to balance the advantages and disadvantages of sunscreen use.

WHAT KIND OF SUNSCREEN WILL THE STUDY USE?

We have purchased Hamilton brand sunscreen for participants assigned to the sunscreen group. If you are in this group you will receive a supply of Hamilton Active Family sunscreen, and (if you choose), we will also provide Hamilton Everyday Face sunscreen for your face and neck.

IF I AM IN THE CONTROL GROUP, AM I ALLOWED TO APPLY SUNSCREEN?

If you are in the control group we will ask you to continue with your usual sun protection behaviour, including sunscreen use. It is fine to apply sunscreen to avoid your skin getting burnt, as you usually would.

WHO IS CONDUCTING THE STUDY?

Professor Rachel Neale, from the QIMR Berghofer Medical Research Institute is leading the study. There are scientists and doctors from around Australia helping with this research. A full list of collaborators is on our website: <https://www.qimrberghofer.edu.au/sund/>



QIMR Berghofer
Medical Research Institute

WHY IS VITAMIN D IMPORTANT?

Having enough vitamin D is important for healthy bones and may have other health benefits. In Australia up to a quarter of Australians are vitamin D deficient.

WHERE WILL I HAVE TO GO TO GIVE BLOOD SAMPLES?

You will be able to go to the blood collection centre that you would attend if your general practitioner ordered a blood test. They will collect a sample and send it to us by courier.

WILL THE STUDY COST ME ANYTHING?

The study will mainly cost you in time. We estimate that the monthly surveys will take about 5 minutes, and the survey at the beginning about 15 minutes. If you are in the sunscreen group it will take you a couple of minutes each morning to apply sunscreen.

By understanding how applying sunscreen affects vitamin D, we can give better advice about how to balance the risks and benefits of regular sunscreen use.