



Childhood Determinants of Adult Health (CDAH) Study

Newsletter December 2024



A Message from the Chief Investigator

This year the CDAH study team has continued to identify new study questions, analyse data and prepare the findings for presentations and publications. Some recent highlights are described below. We hope you will find them interesting.

In 2025, we will be celebrating the 40-year anniversary of the 1985 Australian Schools Health and Fitness Survey – the foundation of the CDAH study. While some of you clearly remember taking part in the survey and might even have your certificate of participation, I know others of you can barely recollect your involvement. Whatever your memories of the survey, I'm sure you have memories of school life and friendships from that time and your participation in the survey continues to benefit our understanding of childhood influences on adult health. We are exploring ways to mark the 40-year anniversary and will look forward to sharing these with you in the new year.

In this newsletter we are calling for expressions of interest to join a Participant Advisory Committee for the CDAH study. This committee will provide a formal mechanism to involve CDAH study participants in setting the future direction of the study and how it communicates findings. Further information is provided below. We look forward to hearing from you if this is something you would like to consider and will be happy to answer any questions.

*Distinguished Professor Alison Venn,
Menziess Institute for Medical Research, University of Tasmania*

Keeping in Touch!

It would be great if you could email us at Menziess.cdah@utas.edu.au to update your details, including any change of address or phone number. Thank You!



Best wishes for Christmas and the New Year from the CDAH Study Team



Childhood Determinants of Adult Health (CDAH) Study Participant Advisory Committee (PAC)

Calling for Expressions of Interest!

As the CDAH study moves into its 40th year in 2025, the study's investigator team are looking to develop a Participant Advisory Committee (PAC). Community involvement in the priorities and conduct of health and medical research is now considered best practice. The PAC will provide advice to the CDAH study research team on a range of areas related to the study including the best ways to disseminate findings and results to participants or the general public; the priorities for analysis of existing CDAH study data and planning for future data collection. The CDAH PAC will ensure that the participants in the study have their voices heard in guiding the future of the study.

We are seeking CDAH study participants to join the PAC. Between 6 and 12 participants will be invited to join the PAC. Candidates for the PAC will be selected based on their contribution to the overall profile of the committee which includes:

- Diversity across age and gender
- Diversity across cultural backgrounds
- Diversity in health status ranging from good health to lived experience of cardiovascular disease or having risk factors for cardiovascular disease
- Representation from across Australia including from different states and rural areas
- An ability to participate in online meetings twice a year

You do not necessarily need to already have experience in being involved in this type of advisory committee before, as we will ensure all members of the PAC receive support and training.

Please complete the [**Expression of Interest**](#) form to register your interest. PAC members will be reimbursed for their time according to the Menzies Institute for Medical Research consumer and community involvement guidelines.

Expressions of interest should be received by January 31, 2025

Researcher Success

Congratulations to two CDAH senior researchers, Professor Seana Gall and Associate Professor Quan Huynh, on receiving Future Leader Fellowships with the Heart Foundation. The Heart Foundation recently announced \$13.7million in funding in support of impactful cardiovascular research in Australia. While Professor Gall's work will focus on reducing the impact of stroke and heart disease through better prevention, Associate Professor Huynh will work towards improving outcomes in people with heart failure who are cognitively and physically frail. You can read more about the Heart Foundation's support for cardiovascular research [**here**](#).

Highlights from recent research findings

You can enter the URL below any of the titles in a browser window (or click on the link) to open up the abstracts of these papers.

Tracking of Cardiorespiratory Fitness from Childhood to Mid-Adulthood

<https://www.ncbi.nlm.nih.gov/pubmed/37848085>

This study looked at whether cardiorespiratory fitness (CRF) persists from childhood to mid-adulthood. CRF is a measure of how well the heart and lungs supply oxygen to muscles during exercise, and a higher CRF level allows you to exercise for longer with less huff and puff. CRF is one of the key indicators of health at all ages. In this study we followed 748 CDAH participants for 34 years to see if their CRF as children associated with their CRF as adults. The results showed that while CRF in childhood was associated with CRF in young and mid-adulthood, the strength of this association weakened over time. This suggests that a high CRF level in childhood makes a higher CRF level in adulthood more likely, but other factors might also influence CRF level over time. The study highlights the importance of promoting CRF throughout life to maintain overall fitness and good health.

A Healthful Plant-Based Eating Pattern Is Longitudinally Associated with Higher Insulin Sensitivity in Australian Adults

<https://www.ncbi.nlm.nih.gov/pubmed/36931561>

A plant-based diet isn't just good for the planet—it might be good for your health too. This study followed 667 adult CDAH participants over 13 years to explore how diets rich in fruits, vegetables, whole grains, and other healthful plant foods relate to insulin sensitivity. Our findings suggest that those who adhered more closely to a healthful plant-based diet tended to have higher insulin sensitivity, indicating a lower risk of developing type 2 diabetes later in life. Your contributions through questionnaires and blood samples made this work possible. Overall, this study highlights the importance of prioritising healthful plant foods over less healthful varieties and animal-sourced foods (e.g., refined grains, sugary beverages, and red meat). So, if you're looking to boost your health and help the environment, a plant-based diet might be the way to go!

Use of Clinical Scores in Young Australian Adults for Prediction of Atherosclerosis in Middle Age

<https://www.ncbi.nlm.nih.gov/pubmed/36737706>

This research used data from the CDAH Study to determine how well a simple cardiovascular health score that does not require lab tests can predict early signs of artery disease. The results show that the risk score and factors measured in young adults can predict the presence and extent of carotid artery plaques (a sign of atherosclerosis) 13 years later, even when current risk factors or changes over time are considered. This suggests that artery damage may start early in life, highlighting the importance of addressing risk factors early to prevent future artery disease.

Childhood Non-HDL Cholesterol and LDL Cholesterol and Adult Atherosclerotic Cardiovascular Events

<https://www.ncbi.nlm.nih.gov/pubmed/38014550>

We looked at the link between childhood blood cholesterol levels and adult heart disease. The study measured over 21,000 people from CDAH and six other studies from Finland and the U.S. The study focused on two cholesterol types: LDL-C, or "bad" cholesterol, and non-HDL-C, which includes all harmful cholesterol types. Children with higher levels of both LDL-C and non-HDL-C levels were more likely to have heart disease as adults. As non-HDL-C was the strongest measure, its use could help find children at higher risk for future heart disease.

WANT TO READ MORE?

There are now over 200 scientific papers published using the findings from the CDAH Study (and 1985 ASHFS Study)! You can find links to all of them on our website by clicking [HERE](#).

Meet the Researcher



Hello to our CDAH community! My name is Dr Jack Evans, and I am an early-career researcher at the Menzies Institute for Medical Research and the current CDAH Researcher Coordinator.

I have been fortunate enough to be part of the CDAH Study team for some time, having examined comprehensive CDAH study data as part of my undergraduate, Honours, and PhD research, as well as the work I now perform as an early-career postdoctoral researcher.

My research is focussed on how changing physical activity at different stages of our lives influences our heart health. Currently, it is not understood if the way we spread our physical activity across the week, or if altering other lifestyle factors alongside our activity levels give different heart health benefits. Using the unique data of the CDAH study, I aim to understand the optimal patterns and levels of physical activity, sleep, and diet so that we can prevent heart disease before it happens.

I would like to thank you all for your generous contributions, without your ongoing support we wouldn't be able to perform this, or any, research. I look forward to sharing our findings with you all!