

WINTER 2020

World-first health and ageing study in older adults

ASPREE-XT KEY FACTS

- ASPREE-XT is a follow-up health study in more than 15,000 ASPREE participants in Australia and the US
- Investigates whether taking aspirin during the ASPREE trial has long lasting effects on health, such as dementia or cancer
- Is Australia's largest health study to track the effects that demographic, genomic, environmental and other factors may have on the health and independence of people aged more than 74 years
- Involves annual study visits (a summary is sent to GPs) and biannual phone calls
- Health data collected includes:
 - physical measures
 - non-fasting blood tests - thinking and memory
 - exercises
 - physical ability
 - self-reported quality of life and well-being
 - current medications
- Co-ordinated through 16 sites
 in south eastern Australia and
 22 sites in the US
- Primarily undertaken through general practice and supported by thousands of Australian GPs
- Funded by the US and Australian governments

COVID-19 challenges

Not many would dispute that the first half of 2020 has been anything less than eventful.

If you were due for an annual visit in the last few months, we sincerely thank you for participating in ASPREE-XT study visits over the phone.

Your participation meant that even COVID-19 could not interrupt this important medical research!

Annual study visits

In light of easing restrictions in some locations, team members have been preparing for when in-person study visits can safely resume.

In-person annual visits provide the opportunity for physical measures, such as blood pressure, to be included in the study. However, these visits will only go ahead if restrictions have eased in your area (set by your Department of Health) and you feel comfortable to meet in person.

Safety precautions

You will be asked about your health prior to your in-person study visit. *On the day of your visit,* if you start to feel unwell, develop a temperature, someone in your household has flu like symptoms, or you have been in contact with a returned overseas traveller since we last spoke to you, please call the team on 1800 728 745 and we will reschedule your visit.

Your safety is paramount. Our team will record their own temperature daily and will be donning a large, clear plastic face shield for as long



ABOVE: An image of the COVID-19 virus (the 19 stands for the year it was discovered) provided by the US Center for Disease Control (CDC).

as necessary. Disinfectant, wipes, gloves and masks will be on hand and we will maintain distancing as much as possible. Feel free to ask for a mask if you would prefer to wear these during the visit.

Continue to see your GP

It is important that you see your GP for routine health care, as you would normally. Ring your practice first as they may have special safety procedures in place.

Thank you

Our team is privileged to work with you, to help answer questions that will matter to older adults around the world.

We thank you for helping us work through the challenges of COVID-19 and very much look forward to seeing you in-person again.

About a TABLET

RESEARCH TALK

If you are interested in science and health and want to know more about research, this column is for you.

What is epidemiology?

Epidemiology is a type of research that investigates disease and other factors that affect the health of populations of people.

The follow up longitudinal study, ASPREE-XT, is an epidemiological study. It collects health information over an extended period of time to understand factors that affect wellbeing in older adults. The study aims to understand conditions leading to poor health, such as frailty. For example to ascertain why some people become frail, while others do not.

Epidemiology usually requires a lot of data collection, number crunching and comparisons (statistics) to make sure the findings are accurate.

What is public health?

Public health is a branch of science that promotes health and quality of life in the broader community. High quality epidemiological studies greatly contribute to improved public health.

The Framingham study (page 3) discovered that high blood pressure can cause a stroke. Today, GPs prescribe medication to lower blood pressure to those in the community who need it. And it all started from a study to identify factors affecting the health of a community.

ASPREE participants represent a community of older adults in the western world. Sharing your health information contributes to knowledge used to improve the health of ageing adults worldwide.

Doctors list ASPREE in top 20 research studies for 2019

ASPREE twice appeared in the top 20 research studies that doctors rated to be the most relevant to their patients' health.

Physicians in the Canadian Medical Association compiled the 2019 list of research most likely to 'change and improve' medical care. The article was published in the American Family Physician Journal, May 2020.

ASPREE research



Your ASPREE trial continues to answer important health questions.

Prior to ASPREE, studies indicated that aspirin may help prevent or delay health conditions affecting older adults, such as Alzheimer's disease and depression. However, aspirin's effect on health had never been studied solely in older people.

ASPREE's findings are new and important for doctors and future generations. Study results are published in respected medical

Aspirin & Alzheimer's Disease

Daily low dose aspirin does not reduce the risk of developing Alzheimer's disease or delay milder losses of memory and thinking ability in older adults.

These ASPREE findings, published in the Journal of Neurology, compared thinking and memory measures from participants in the aspirin group with those in the placebo group over the average 4.7 years of the trial.

By the end of ASPREE, 575 people developed dementia. Fewer than half of the cases were Alzheimer's disease.

ASPREE-D (Depression) sub-study

ASPREE-D is one of several substudies that ran alongside the main ASPREE trial.

A sub-study is an 'add-on' study with a purpose to answer specific health questions. In this case, the question was whether aspirin's antiinflammatory properties might help reduce the onset and severity of depression in older adults.

Worldwide, an estimated 10 - 15% of people aged 70 - 85 years experience

journals to help researchers around the world learn more about aspirin, health and ageing.

It's important to remember that findings from the ASPREE trial apply to healthy older people, who do **not** have a medical need to take aspirin.

Always speak to your GP before starting or stopping daily low dose aspirin.

Links to ASPREE publications are on www.aspree.org (aspree.org/aus/ researchers/aspree-publications/).

Study investigators also looked at whether the effect of aspirin on thinking and memory differed for age-groups, gender, ethnicity and general health factors, such as blood pressure. They found no evidence of benefit for any group.

"Because dementia can take years to develop, it is possible that ASPREE was not a long enough trial to show possible benefits from aspirin, so we will continue to examine for longlasting effects of aspirin in study participants in the coming years," said lead author, Dr Joanne Ryan.

depression at some point in time.

By the end of the ASPREE-D study, the rates of depression, severity of symptoms, quality of life and use of anti-depressants were similar for those in the aspirin group and those in the placebo group.

The authors concluded that taking 100 mg daily aspirin did not prevent depression in healthy older adults. This paper was published in the Journal JAMA Psychiatry. Broken key interrupts Burnie update



ABOVE: Alma and Judy at the Burnie study update in February this year.

ASPREE's Sally Haywood, won't easily forget this year's study update in Burnie.

To her horror, the venue's security alarm went off at the start of morning tea.

Turns out a rower attempting to access boats at the venue had punched in the wrong code - and then broke the key in the lock that disabled the alarm.

We do apologise for the disruption. Sally was sorry to have lost the opportunity to chat with participants, though she did succeed in getting the siren shut down.

How a former US President spurred health discoveries

Franklin D. Roosevelt's (FDR) death from stroke in 1945 triggered the start of a long-term health study that changed medical history.

FDR died at 63 years of age, close to the average life expectancy for men at that time, and when cardiovascular disease (heart disease and stroke) caused 50% of deaths in the US.

His vice-president, Harry Truman subsequently passed the 'National Heart Act' which resulted in funding for a longitudinal (long-term) study to understand cardiovascular disease. Between 1948 - 1952, 5,209 adults living in the Framingham district near Boston, Massachusetts, enrolled in the 'Framingham Heart Study' (FHS).

Participants underwent physical measures and interviews on their diet and lifestyle choices over their lives. Results were reported back to their physician.

Fast forward several decades and the FHS is a famous example of longterm medical research saving lives. The study successfully joined the dots between 'risk factors' (such as high blood pressure, high cholesterol, age, gender, obesity, diabetes and smoking) and cardiovascular disease. New knowledge led to investment in new medicines to treat risk factors, such as high blood pressure and cholesterol. Health care focussed on disease prevention.

It's hard to imagine that in FDR's lifetime, cardiovascular disease was accepted to be an inevitable part of ageing.

That's the power of medical research.

ASPREE-XT, which is also a long-term study, has the specific purpose to improve health for older adults.

RIGHT: Franklin Delano Roosevelt's death in 1945 led in part to funding for a study that would change history.



Main source: Mahmood SS, Levy D, Vasan RS, Wang TJ. The Framingham Heart Study and the epidemiology of CVD: a historical perspective. Lancet. 2014.

ASPREE-XT team meets up in Melbourne



ABOVE: A quick snap of the Australian ASPREE Project team taken in early March this year. Our large team is made up of: regional and metropolitan field staff; administration officers (whom you often speak to at ASPREE); operations managers; data, endpoint and professional support teams; sub-study teams and study investigators. Members of our field team, who conduct study visits in your area, were in Melbourne for a special refresher training. Makes a great opportunity for a group picture.

About a TABLET

Participant life Sitting high in the saddle

In his 78 years, Wally Ingram has spent many an hour in the saddle, and he's not planning to stop anytime soon.

The Gippslander competes locally in a unique Australian equestrian sport called campdrafting. This test of horsemanship is thought to have originated between stockmen in the 1800s.

A competitor selects and 'cuts' one head of cattle from a small group in a yard (the camp), brings it out into the arena and controls the animal's movements around a series of pegs, working against the clock.

At any time, the animal might stop, take off, turn too fast or not at all. A trained horse, skillful riding, and a keen eye are essential to control speed and movement. "You have to be in the right position at the time," advises Wally. "Work the cow's eye, if you're too close, it will turn too quickly." The national sport attracts hundreds of amateur riders and professional stockmen alike. Wally confesses to winning a few ribbons in his 25 years of competitive campdrafting.

His love of horses is lifelong, encompassing years of competitive show jumping, cross-country and novelty riding events.

Wally taught himself to campdraft, observing tactics from fellow competitors to "sharpen myself up". He spent years training his stockhorses. "My horses are cattle-smart," he says. "I only ride them when I compete now. Before a competition I will ride for 15 – 30 minutes, until we are in tune."

It's Wally's passion for the sport and the camaraderie with "a good bunch of people" at local clubs that he's keen to revisit when restrictions lift.

Until he returns to the saddle, Wally continues to transport cattle, work his property and spend time with his family. His stock-horses quietly graze ready for the next event.



ABOVE: Wally Ingram demonstrates campdrafting skills at Dumbalk in March this year.

Staying in touch with you is very important

- Have you moved?
- Have feedback? We love to hear constructive feedback.
- Have a question about ASPREE or ASPREE-XT?
- Have a story to share?
- Please let us know!



(toll free from a landline) Email: aspree@monash.edu Website: <u>www.aspree.org</u>

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In brief

What your microbiome says about your health



WINTER 2020

Microbiome is a bit of a buzz word that you may have heard of late, and not without good reason.

Growing evidence points to the tiny organisms which live in our intestine (gut), as having a significant impact on our health and wellbeing.

The gut microbiome is a collective term for trillions of bacteria, viruses, fungi and other microbes in the gut (measured in a stool sample or 'poo').

Everyone has their own unique microbiome. Changes to the microbiome are linked to cancers, chronic diseases, immunity (ability to fight infection), brain function and behaviour.

Ageing is associated with changes in the gut microbiome, however studies in older adults have been either too small or lack sufficient detail to understand their impact on health.

Recent funding for a new ASPREE microbiome sub-study will enable researchers to understand the link between the onset of age-related diseases, such as dementia, heart disease and cancer with changes in the microbiome.

We look forward to sharing more information about this exciting sub-study in the months to come.

ASPREE-XT Funding Organisations

- National Institute on Aging (NIA/NIH in the US)
- National Cancer Institute (NCI/NIH in the US)
- National Health and Medical Research Council of Australia (NHMRC)

ASPREE-XT Collaborating Organisations

- Monash University
- Menzies Institute for Medical Research, University of Tasmania
- Australian National University
- The University of Adelaide
- Berman Center for Outcomes & Clinical Research (Minnesota, US)