



Image: istock

WORLD-FIRST AGEING HEALTH STUDY IN OLDER ADULTS

SPRING 2023

If you wonder how sharing your health information with ASPREE makes a difference, read on! We are pleased to summarise a few studies from the ASPREE project in this edition of the newsletter. Each study gives health professionals and the community new insights into ageing.

ASPREE study shows activities most likely to help ward off dementia

Computers, writing, and playing puzzles or games topped a list of leisure activities that may help older adults avoid dementia. Crafting activities came second. These ASPREE findings, considered

some of the most robust in this field to date, may help older individuals and health professionals plan activities to reduce dementia risk.

In this study, participants who routinely engaged in literacy and mental acuity tasks such as taking education classes, journaling, and doing crosswords, were 9-11% less likely to develop dementia than their peers.

Creative pursuits such as crafting reduced the risk by 7%.

A/Prof Joanne Ryan, senior author to the study, said the ASPREE project is uniquely positioned to help identify ways to prevent or delay dementia.

“Unlike most studies that focus on just one or two specific leisure activities, this study looked at a range of activities many older people undertake and took into account individuals’ formal education and health,” she said.

Literacy and mental acuity tasks include things like adult education classes, keeping a journal, writing letters and completing quizzes and crosswords.

Reading and keeping up with the news are more passive mental activities, while creative hobbies include activities like painting, knitting or woodwork.

Different leisure activities activate different parts of the brain.

Education classes, computer usage and writing - all of which require the processing and storage of new information - may help slow brain ageing and protect against dementia.

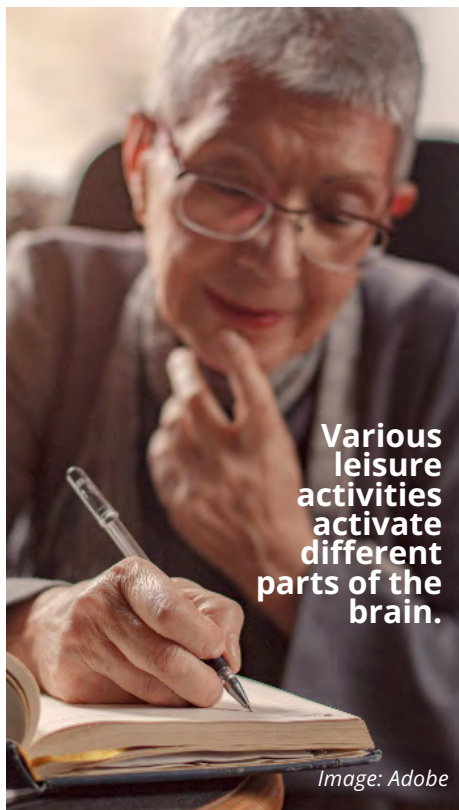
Writing is a particularly complex process that utilises a large range of cognitive functions.

The link between leisure activity and dementia risk was unaffected by gender, years of formal education or socio-economic status.

Social activities, such as meeting friends or going on planned excursions did not show a clear link with dementia risk in this study.

A/Prof Ryan said social connections require further analysis as some leisure activities had a social component and most participants were already leading socially active lives.

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Various leisure activities activate different parts of the brain.

Image: Adobe

THE RESEARCH

A message from
ASPREE-XT
 Co-Principal
 Investigator,
Prof John McNeil



Every year ASPREE research reaches new milestones, and 2023 does not disappoint.

The senior ASPREE project team started the application process for funding to extend the duration of ASPREE-XT beyond mid next year. We won't know the outcome until next year and shall let you know as soon as we hear.

We welcome Associate Professor Joanne Ryan as the new Co-Principal Investigator to the ASPREE-XT study in Australia.

Joanne has been a longtime investigator to the ASPREE project and brings an enormous amount of research expertise in cognitive health, dementia and depression.

She supervises a number of studies by PhD students, including the study on the front page of this newsletter.

Sharing the leadership of ASPREE-XT, of important research of this scale and scope in older adults, is a privilege.

The ASPREE project has already informed new aspirin prescribing guidelines. It continues to become a world-leading source of high quality health information to teach scientists about ageing health.

Success of this research is very much due to the commitment of you, our participants, who generously give your time, and your GP. We also thank friends or family, who may support your engagement in the study.

Introducing
 new Co-Principal
 Investigator
 of ASPREE-XT,
 A/Prof Joanne
 Ryan



Characteristics of study participants

These tables summarise characteristics of Australian participants (left), and Australian and US participants (right) at entry into the ASPREE trial (2010 - 2014) and when the ASPREE-XT started (mid 2017). Currently, the average age of ASPREE-XT participants from both countries is **84** years.

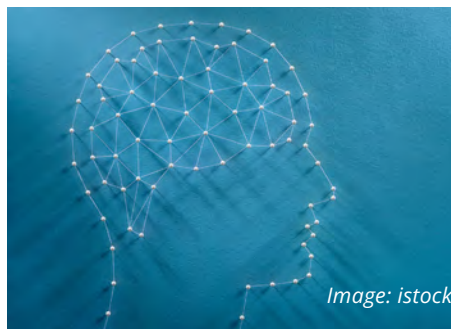
AT STUDY ENTRY (AUSTRALIA)		
	ASPREE TRIAL	ASPREE-XT STUDY
PARTICIPANTS	16,703	14,849
AGE	PROPORTION OF AGE GROUPS IN AUSTRALIAN PARTICIPANTS AT ENTRY INTO ASPREE VS. ASPREE-XT	
70 - 74 YEARS	58%	15%
75 - 84 YEARS	38%	73%
85+ YEARS	4%	12%
SEX	55%	55%

Above: This table shows the shift in the age groups of Australian participants from when they enrolled in ASPREE to starting in ASPREE-XT.

AT STUDY ENTRY (AUSTRALIA & US)		
	ASPREE TRIAL	ASPREE-XT STUDY
AVERAGE AGE	75 YRS	81 YRS
LIVING ALONE	31%	37%
SMOKING	3%	2%
ALCOHOL USE	78%	66%
DIABETES	10%	16%

Above: At the start of ASPREE-XT, more participants (AUS & US) lived alone at home. More reported having diabetes, but fewer smoked or drank alcohol. You are in one of few studies that focuses solely on older adults!

Aspirin and knocks to the head: new analysis



A new analysis of ASPREE data has highlighted the small but important risk of intracranial bleeding (bleeding in and around the brain) in people taking aspirin regularly.

In part, this bleeding arose from bleeding on the surface of the brain (subdural and extradural haemorrhages) which typically occur after a head injury, such as that sustained from a fall.

Prof John McNeil said the risk of these bleeds in older adults is in-

creased as we age because blood vessels become more fragile and there is the greater risk of falls. In those taking aspirin the likelihood of serious bleeding increases further as a result of aspirin's ability to delay blood clotting.

Prof McNeil added that for **older adults taking aspirin on a doctor's advice**, usually after a stroke or evidence of heart disease, the benefits of aspirin substantially outweigh the risks of haemorrhage. **These people should not stop aspirin treatment except on a doctor's advice.**

Individuals taking daily aspirin should take extra care to avoid falls, and to seek medical advice if headaches and other symptoms persist after striking one's head.

Media outlets in Australia, US, Canada, Europe, Africa and Asia reported on this study during July - August 2023.

>> Stay informed of the ASPREE project and sub-studies - visit www.aspree.org/au

Study findings may help doctors identify older adults at risk of anaemia

Your participation in the ASPREE study has contributed to the world's largest investigation into the effect of aspirin on anaemia in older adults.

The study was published in a medical journal in June this year. Findings from this study may help doctors more quickly identify older patients at higher risk of anaemia and who may benefit from regular monitoring for this condition.

Anaemia occurs when there are not enough healthy red blood cells circulating in the bloodstream. The condition is a common issue among older adults and can lead to fatigue, physical limitations, low mood and difficulties with thinking and memory.

Surprisingly, around one third of all cases of anaemia in older adults have no known cause.

This study found that over the course of the ASPREE trial, 18% of participants in the aspirin group and 15% in the placebo group (no aspirin) developed anaemia. This suggests that there's around a 20% higher risk of developing anaemia with long term aspirin use compared to non-aspirin use.

This new research draws on health information in the ASPREE-Anaemia sub-study and blood samples collected in the ASPREE Biobank (read more about the Biobank on back page).

Blood tests indicate that anaemia may be caused by tiny, undetectable bleeding, most likely in the stomach or intestine.

Prof Zoe McQuilten, who led the ASPREE-Anaemia sub-study said few previous studies had looked at the effect of prolonged aspirin use on the gradual development of

anaemia in older adults.

"This study gives a clearer picture of the added risk of developing anaemia with long-term aspirin use," said Prof McQuilten.

"Older adults are more likely to become anaemic generally, and now doctors can potentially identify patients at higher risk of developing anaemia."

Prof McQuilten emphasised the importance for older adults to follow individual advice from their doctor about their daily use of aspirin.



"People should not change their aspirin regimen without first speaking to their doctor,"
Prof Zoe McQuilten

Above: Prof Zoe McQuilten led the ASPREE-Anaemia sub-study.

"For some older adults, aspirin is a valuable therapy to prevent additional heart attacks or ischaemic stroke," said Prof McQuilten. "People should not change their aspirin regimen without speaking to their doctor."

She noted that GPs are experienced at managing anaemia and low iron levels.

Media outlets in Australia, Canada, the US, across Europe, and in Asia and India ran stories about this new research finding.

be particularly important to ward off dementia, in addition to lifestyle choices, such as regular exercise, a good diet and not smoking," said A/Prof Ryan.

Study findings were picked up by media in the US, UK, Canada, India, China, France & Australia in July 2023.

YOUR QUESTIONS ABOUT THE ASPREE PROJECT

Q: Why are some of the questions on ability limited to yes/no answers? I want to say that I can walk 3km, when all I am asked is - Can I walk across the room?

A: This is a great question.

The 'yes' or 'no' question format is quick and easy for everyone to answer. These questions are also part of a survey that has been scientifically tried and tested to capture factors that can impact one's independence. Using this survey to capture the same information as other studies, enables meaningful comparison between different groups of older adults.

It is most helpful if you please choose the answer closest to your ability at that time.

Q: Will ASPREE-XT continue?

A: We really hope so because this is such an important study, but we won't know until mid next year.

Our team has applied for ongoing funding, however the application process can be quite lengthy.

What we do know is that it's business as usual until at least mid next year. We will let you know the outcome of the grant application as soon as we know.

Q: Will there be in-person study updates?

A: Yes, and we are looking forward to these too! In-person presentations are being booked for late 2023/early 2024. Invitations to the updates will be sent by mail.

Feel free to bring a loved one to the presentation, so they too understand your contribution towards better health for future generations!

You can also watch at any time, a recorded online study update from earlier this year. Go to: aspree.org/aus/resources-and-media/ (The video looks like the image below).

Continued from front page

The study involved 10,318 Australian ASPREE participants who reported social and life-enriching activities in ALSOP questionnaires between 2010 - 2020.

"While it's not a silver bullet, keeping the mind active and challenged may



WELCOME!

Online update on the ASPREE Project

MAJOR ASPREE-XT SUB-STUDIES: MICROBIOME & BIOBANK



Above: the ASPREE Biobank Biobus stopped in Wollongong earlier this year.

ASPREE-XT MICROBIOME

Microbiome studies suggest that the balance of trillions of bacteria, viruses and fungi in our gut can influence health and disease, such as the development of cancer, as well as our mood.

With so few studies that focus only on older adults, very little is known about how the gut microbiome impacts health in older age.

The ASPREE-XT Microbiome sub-study is addressing this knowledge gap by collecting gut microbiome samples for researchers to learn how microbes in our gut can influence health and wellbeing.

ASPREE BIOBANK

New collections of blood and urine samples are continuing through the ASPREE Biobank and Biobus activity for future health biomarker research.

If you have already returned a microbiome kit to us or donated blood/urine – thank you!

If you have any questions about the Microbiome / Biobank sub-study, or if you have misplaced your microbiome kit and would like a new one, please contact the team on 1800 728 745.

IN RECOGNITION OF CARERS, FAMILY AND FRIENDS

We dedicate this edition of participant stories to the wonderfully committed family and friends, who support their loved one's ongoing involvement in ASPREE-XT.

We know of young adults who've driven grandparents to attend study updates. Spouses and children have helped their loved one to attend in-person study visits. Others have informed aged care facilities about their family member's wish to continue in the study.

Shirley Eddington (right) is not an ASPREE-XT study participant, though she has a strong interest in the study.

She attended local study updates and accompanied husband of 57 years, Les, at his in-person ASPREE-XT study visit.

Following Les' diagnosis with Alzheimer's disease in 2019, Shirley has made sure the disease didn't stop his involvement in ASPREE-XT. "He enjoyed being in this study," says Shirley.

"Les is still a part of the research, and that's really good. His participation is very worthwhile and of value, and helps to learn new things about ageing and health."

The retired teacher knew very little about dementia when her mother-in-law was diagnosed: "We didn't know the signs back then."

Dementia awareness, she says, has come a long way and credits the support and guidance of local dementia support groups: "From my experience, it's the people that make the groups so supportive."

Her advice to other carers is to get as much accurate information about dementia as possible, and to seek out local support groups.

"I'm able to be a carer because of the support I get. I've learned about resilience and coping mechanisms



Above: Shirley and ASPREE participant Les, celebrating his 82nd birthday this year.

for being a full-time carer," says the grandmother of five.

Shirley supported Les' involvement in ASPREE since he enrolled in the study in 2013. "We have always been happy to be involved in ASPREE, and research is a good thing to learn the facts [about disease and health]," she says.

Our thanks to Shirley and Les for sharing their story with us.

ASPREE-XT is a once in a lifetime opportunity for older adults to participate in such a large, comprehensive study. Importantly, this includes participants living with dementia. Our team will tailor study activities to personal circumstance.

Everyone's contribution to the ASPREE project drives a healthier future for children, grandchildren, nieces and nephews and the wider community! Thank you, we are very grateful for your participation.

A special shout-out to inspiring ASPREE-XT study participants who continue in the study while also caring for others.

Please do contact ASPREE if you experience difficulties with study activities. Our team will always work around your needs at the time.

Staying in touch with you is very important

- Have you moved?
- Have a new GP?
- A change in circumstance?
- Would like to read about a particular aspect of ASPREE in a future newsletter?
- Please let us know!



CALL:
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(toll free from a landline)

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ASPREE-XT Funding Organisations

- National Institute on Aging (NIA/NIH in the USA)
- National Cancer Institute (NCI/NIH in the USA)
- 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, USA)
- 21 study sites across the USA