

Participant Information Sheet (Clinic Visit)

The Menarche-to-PreMenopause (M-PreM) substudy

1 Introduction

You have been a participant in Women's Health Australia since 1996 – thank you! We have collected valuable data about Australian women and now we want to find out how we can improve and personalise healthcare.

You expressed an interest in a new substudy of the Australian Longitudinal Study on Women's Health (called Women's Health Australia): the Menarche-to-PreMenopause (M-PreM) substudy. You will be asked to attend a research clinic for a free health check and to donate a sample of blood, which will be used for routine pathology testing and genetic research.

Before you decide whether or not you wish to participate in this study, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully and discuss it with others if you wish.

Participation in this research is voluntary. If you don't wish to take part, you don't have to. Your participation in Women's Health Australia is not affected by whether or not you decide to take part in the M-PreM substudy.

2 What is genetic research?

Genes are made up of DNA – the chemical structure carrying your genetic information that determines many human characteristics, such as the colour of your eyes or hair.

Researchers study genes in order to understand why some people have a certain condition, such as diabetes and asthma, and why others do not. Understanding a person's genes may also explain why some people respond to a treatment or experience a side effect, while others do not.

3 What is the purpose of this research?

Women are at greater risk of poor health than men as they age. This could be due to one or a combination of factors in a woman's life. Therefore, the purpose of this research project is to examine how reproductive (e.g. age at menarche or first period), sociodemographic (e.g. education level, where you live), lifestyle, and genetic factors influence risk of poor health in women.

4 Who is running this study?

This study is being run by Professor Gita Mishra at the University of Queensland and the University of Newcastle, and has been funded by the National Health and Medical Research Council.

5 Why have I been invited to participate in this study?

In your most recent survey, you indicated that you were interested in the M-PreM substudy. This study is not suitable for you if you are pregnant or receiving treatment for a reproductive cancer.

6 What does this study involve?

If you agree to take part, you will need to:

- 1) provide a blood sample at PathWest Nedlands (QEll Medical Centre), preferably the day before or on the day of your health check,
- 2) answer 3 short questions about the blood collection, and
- 3) do a health check at Harry Perkins Institute of Medical Research (in Murdoch).

You can book a health check by calling Women's Health Australia, registering your interest on the M-PreM website, or we will call you after sending you an invitation. You will be sent an appointment confirmation by email or mail that contains instructions on what you will need to do in preparation for your appointment.

At the PathWest Collection Centre, approximately 30mL (just over 1 tablespoon) of blood will be taken from a vein in your arm to measure your levels of cardiovascular and metabolic biomarkers and sex hormones. Blood will also be collected for storage and genetic analysis (please refer to sections 10 and 13 for more information).

The health check will take approximately 1 hour. It will include:

Short questionnaire	You will be asked questions about when you last had something to eat or drink, your menstrual cycle status and hormone use, and respiratory health. .
Blood pressure and resting heart rate	Using an automated blood pressure monitor that is commonly used in clinics and hospitals.
Handgrip strength	By squeezing a device known as a dynamometer using each hand.
Standing balance test	Timing how long you can stand on one leg with your eyes open and then with your eyes closed.
Chair rise test	Timing how long it takes for you to complete 10 sitting-to-standing exercises.
Cognitive test	By completing a short questionnaire.
Body size measurement	Your height, weight, and waist, hip, arm, and thigh circumference will be measured.
Physical activity monitor and sleep diary	You will be asked to wear a small physical activity monitor (4.5cm x 2.5cm) on your thigh and complete a sleep diary for 8 days. The physical activity monitor will be attached at the end of the health check and you will be provided instructions on what to do and how to return the device at the end of the 8

days.

Menstrual cycle diary If you have ever been diagnosed or treated for polycystic ovary syndrome, you will be asked to complete a menstrual diary for 3 months.

7 What are the possible benefits of taking part?

Research results from this study are unlikely to be of any immediate and specific benefit to you. The data from this study will be analysed and future medical discoveries may result from your participation. This will help improve and personalise medical treatment and care for women overall.

We will, however, send you the results of your cardiovascular and metabolic biomarker test, body size, blood pressure and resting heart rate, and physical activity and sleep pattern, where available. If you are concerned about any of these results, we encourage you to seek advice from your GP.

8 What are the possible risks and disadvantages of taking part?

- The side effects of having blood collected may include bleeding or bruising at the injection site and possible dizziness and/or fainting. Please advise the nurse if you normally feel dizzy or faint when you have blood collected.
- You may feel uncomfortable with a particular measurement/test. If you do not wish to answer a question or do a test or measurement, you may skip it and go to the next part of the health assessment, or you may stop completely.
- It may be possible to trace your genetic sequence back to you, however, this is very unlikely because your genetic data and personal information will be kept in physically separate and secure locations.
- It is also possible that the genetic analysis may reveal information that is important for your health care. You can decide whether or not you wish to be contacted if this situation arises.

9 What will happen to the information collected about me?

- All personal, questionnaire and genetic information collected for the study remains confidential in accordance with the National Health and Medical Research Council (NHMRC) ethical guidelines and the Australian 1988 Privacy Act.
- Your personal details, questionnaire data, and genetic data will all be stored separately.
- The data you provide in this study will be linked to the questionnaire data collected by Women's Health Australia in previous and future surveys.
- The only link between your personal details and your other data is your participant ID number. Linking your personal details and other data using this number is restricted to authorised members of the Women's Health Australia research team at the University of Newcastle.
- All other questionnaire and genetic information data about you will be de-identified (*i.e.* will not contain identifying information, such as your name, address, and date of birth) and stored securely at the University Queensland.

- Your information will be stored indefinitely at these two sites.
- This information may continue to be valuable to researchers many years into the future, and may be considered for use in future projects. These projects will require approval by the relevant ethics committees before they begin.
- Your genetic information (but not your biological sample), sleep patterns, physical activity data, and some of your questionnaire information (but not your name, address or date of birth) may eventually be put into an international data repository. Information in the repository will only be available to researchers from around the world who are approved to study how genes, sleep, or physical activity cause a variety of health conditions.
- Your data will be combined with the data from many other women before analysis so there will be no way of identifying you as a participant. Results of this research project may be presented in scientific or public articles and talks, but your identity will not be revealed.

10 What will happen to my biological sample?

Your blood sample will be used to test markers of heart disease and metabolic disorders (e.g. Type 2 diabetes), and sex hormone levels. The research team will look at the differences and similarities of these blood biomarkers between participants. With the lifestyle, sociodemographic, and reproductive information, we will examine why some people are more likely to have a certain condition, such as heart disease, than others.

We will also use your blood sample to extract your DNA and analyse a small number of genes which are likely to be associated with determining the age when your period starts, other reproductive characteristics, and the development of heart and metabolic diseases. The analysis of these gene cannot be used for diagnosis right now. However during the course of this research project, we may discover new information that is important for your health care. You will be asked whether you wish to receive the results (this may require you to have the test repeated in a clinical laboratory). If you agree, we may contact you if such a situation arises.

11 Will I receive any payment if I participate in this study?

Because you will be asked to attend a research clinic and a pathology collection centre, you will be sent a \$20 gift card to cover travel costs after you have completed your participation in the study.

12 Will I be given the results of the research project?

You will receive results in the mail of your cardiovascular and metabolic biomarker test, blood pressure and resting heart rate, body measurements, physical activity and sleep patterns. Also, the results of the research project may be presented in scientific or public articles and talks. We will not report the study results in any way that could identify you. Only grouped and summarised results will be reported. We will not publish any information that could identify any particular person.

13 Sample repository (Long term storage of samples)

Your DNA and blood samples will be stored indefinitely for future research projects, as part of Women's Health Australia in collaboration with Professor Gita Mishra that may or may not be related to this project. All future projects will require approval from the Human

Research Ethics Committee with oversight of Women's Health Australia. The blood and DNA that you provide (but not your personal details) may be made available to other researchers working with Professor Mishra to study different health conditions, some of whom may have commercial interests. If you consent to participate, you will be donating your blood freely for these purposes and waive any claim to commercial rights arising from this work. Your DNA and any remaining blood samples will be stored securely at the University of Queensland Institute for Molecular Biosciences.

Your blood and DNA samples will be stored in tubes with a barcode label containing your project ID number (not the Women's Health Australia participant number you receive on emails and letters). This means that your samples may be re-identifiable, however the likelihood of this happening is very low. You can have the samples destroyed at any time by contacting the Women's Health Australia.

14 What if I don't want to participate in this study, or if I want to withdraw later?

Participation in this study is voluntary. It is completely up to you whether or not you wish to participate and it will not affect your relationship with Women's Health Australia. You can leave the study at any time without giving a reason and without consequences of any kind.

If you are unable to attend the clinic, you can request a M-PreM@home package that will allow you to do the following measurements and tests by yourself:

- **Short questionnaire** – regarding your menstrual cycle status and hormone use, respiratory symptoms
- **Body size measurements** – as described in section 6.
- **Physical activity monitor and sleep diary** – as described in section 6.
- **Menstrual diary** – as described in section 6.
- **Saliva sample** – you will be asked to provide 2ml of saliva, which will be used to extract DNA for genetic analysis.

You can also specifically withdraw your biological samples at any time without consequences of any kind. If you do withdraw your biological samples, you can choose to destroy all stored samples and/or unpublished data that has been obtained from using the samples. Note that data that are already deposited in an international data repository or published will not be withdrawn and destroyed.

15 Who has reviewed the research project?

All research in Australia involving humans is reviewed by an independent group of people called a Human Research Ethics Committee (HREC). The ethical aspects of this research project have been approved by the Metro South Health and Health Service HREC.

This project will be carried out according to the *National Statement on Ethical Conduct in Human Research (2007)*. This statement has been developed to protect the interests of people who agree to participate in human research studies.

16 Further information and who to contact

If you want any further information concerning this project, you can contact Women's Health Australia on 1800 068 081 (Freecall) or email info@alsw.org.au.

If you have any complains about any aspect of the project, the way it is being conducted or any questions about being a research participant in general, then you may contact the Metro South Health and Health Service Human Research Ethics Committee (EC00167) (Approval number HREC/2019/QMS/52052):

Contact Person: MSH HREC Coordinator
Phone: 07 3443 8049
Email: MSH-Ethics@health.qld.gov.au

17 How do I participate?

If you are interested in participating in the M-PreM study, please contact Women's Health Australia on 1800 068 081 (freecall) or email info@alswh.org.au to make a booking or to get more information.



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