PARTICIPANT INFORMATION SHEET & CONSENT FORM

NUS-IRB Reference Code: _*2026-87*_____

1. Protocol title

Gut Microbiome Composition and Health in NUS staff

2. Principal Investigator and co-investigator(s), if any, with the contact number and organization:

Principal Investigator:
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3. What is the purpose of this research?

You are invited to participate in a research study. This information sheet provides you with information about the research study. The Principal Investigator (the person in charge of this research) or his representative will also describe this research to you and answer all of your questions. Read the information below and ask questions about anything you don't understand before deciding whether or not to take part.

Daily activity behaviours, including physical activity, sedentary time, and sleep, together form a 24-hour activity composition that has been associated with cardiovascular health across adulthood. Separately, growing evidence suggests that the gut microbiome plays an important role in metabolic, inflammatory, and vascular processes relevant to ageing and chronic disease. However, the interrelationships between objectively measured daily activity composition, cardiovascular health, and gut microbiome composition remain poorly understood.
The aim of this observational study is to examine the associations between daily activity composition, cardiovascular health indicators, and gut microbiome composition in adults.

4. Who can participate in the research? What is the expected duration of my participation? What is the duration of this research?

NUS staff who participated in the NUS1000 staff edition study (NUS-IRB-2024-486) can participate in the current study. The study will take approximately 1 day to finish.

5. What is the approximate number of research participants involved?

This study will recruit up to 500 research participants.

6. What will be done if I take part in this research study?

You will be invited to come to our research lab to complete a diet questionnaire, and to pick-up a stool collection kit, including a collection tube, and a return mail envelope (postage paid). This visit will take approximately 30 min.
When you return home, you will need to self-collect a stool sample using the kit provided. Stool collection can be done at any time of the day. Detailed instruction of how to use the stool collection tube will be provided via printed instruction, and our research staff will go over the instruction with you.
Using the provided sampling device, you will place approximately one scoop (~1 g) of stool into the tube, collected via a fecal catcher (small scoop that comes with the tube) designed to avoid contamination from urine. The stool samples would be mailed back to our collaborators at AMILI. Although the sealed sample can last for up to 2 month in room temperature, we strongly advice that you mail sample within 1-2 days of collection.

7. If biological samples are taken, what will be done with my samples?

The stool sample will be stored in AMILI's lab at -80 °C, and an aliquot will be taken for DNA extraction and shotgun metagenomic sequencing. This procedure will identify different microbiome in the stool sample, and provide an overall composition of your gut health.

The analysis is conducted on de-identified samples. The result of the DNA sequencing data will be stored in a double-layer verification AWS cloud storage, requiring account credentials and security code identification. All access to the dataset is restricted and is managed by the security apparatus of AWS, and is ISO 27001 compliant. The dataset can only be accessed by authorised individuals.

8. How will my privacy and the confidentiality of my research records be protected?

ince you have already participated in the NUS1000 study (NUS-IRB-2024-486), we will not collect any additional identifiable information (e.g., Name, phone number, and NRIC number). We will only share your unique study ID with external collaborators (AMILI), who will process and discard your biological samples. The result of the DNA sequencing data will be stored in a double layer verification AWS cloud storage requiring account credentials and security code identification. All access to the dataset is restricted and is managed by the security apparatus of AWS and ISO 27001 compliant. The dataset can only be accessed by authorised individuals.

A ll personal data (will be kept separate from the stool sample and research data. The link between your personal data and the unique study ID will be kept confidential by the principal investigator. Personal data will be kept for a minimum of 10 years before being discarded.

Personal data will never be used in a publication or presentation. All data collected will be kept in accordance to the University's Research Data Management Policy. Research data used in any publication will be kept for a minimum of 10 years before being discarded.

9. What are the possible discomforts and risks for participants?

This study involves no more than minimal risk to the participants as the administration of surveys and collection of stools are non-invasive.

10. What is the compensation for any injury?

If you follow the directions of the PI in charge of this research study and you are injured, NUS will pay the medical expenses for the treatment of that injury. By signing this consent form, you will not waive any of your legal rights or release the parties involved in this study from liability for negligence.

11. Will there be reimbursement for participation?

You will receive a copy of your gut microbiome composition report as form of reimbursement.

12. What are the possible benefits to me and to others?

There is no direct benefit to you by participating in this research study. The knowledge gained may benefit the public in the future.

13. Can I refuse to participate in this research?

Yes, you can. Your decision to participate in this research study is voluntary and completely up to you. You can also withdraw from the research at any time without giving any reasons, by informing the principal investigator and all your data collected will be discarded. Refusing to participate in this research will not affect your relationship with the research team nor your involvement in any current or future studies.

14. Whom should I call if I have any questions or problems?

Please contact the Study Team (nus1000study@nus.edu.sg; Ph: +65 66015238) in the first instance for all research-related matters and in the event of research-related injuries.

For an independent opinion specifically regarding the rights and welfare of research participants, you may contact a staff member of the National University of Singapore Institutional Review Board at telephone (+65) 6516 1234 [Mondays to Thursdays from 8.30am to 6pm, and Fridays from 8.30am to 5.30pm, except public holidays] or email at irb@nus.edu.sg.

Consent Form

Protocol title:
Gut Microbiome Composition and Health in NUS staff

Principal Investigator with the contact number and organization:
Prof. Michael Chee, Centre for Sleep & Cognition, Yong Loo Lin
School of Medicine, National University of Singapore, MD1: 12 Science Drive 2,
Singapore 117549; michael.chee@nus.edu.sg; +65 66015238

I hereby acknowledge that:

1. I have agreed to take part in the above research.

2. I have received a copy of this information sheet that explains the use of my stool sample and date in this research. I understand its contents and agree to donate my stool sample and date for the use of this research.

3. I can withdraw from the research at any point of time by informing the Principal Investigator and my stool sample will be discarded.

4. I will not have any financial benefits that result from the commercial development of this research.

5. I consent / do not consent* to have the coded data made available for future research studies. This will be subject to an Institutional Review Board's approval.

6. I *agree / do not agree** to be re-contacted for future related studies. I understand that future studies will be subject to an Institutional Review Board's approval.

_____ _____
Name and Signature (Participant) Date

_____ _____
Name and Signature (Consent Taker) Date