



PARTICIPANT INFORMATION SHEET

Evaluation of a sedentary time fractionation intervention for adult home-based workers.

What is the study about?

There is a strong evidence base linking sitting prolonged bouts of sitting with an increased risk of conditions such as type-2 diabetes and cardiovascular disease. It is possible that home workers sit for longer continuous periods of time than office-based workers. This study will initially use a thigh-worn activity monitor device to record the physical activity and sedentary time (this is the time spent sitting or in a reclined position with a low energy expenditure) of older adults who are working from home. After three weeks of wearing the physical activity monitor, we will implement a home-based sedentary time fractionation intervention program. This program is designed to interrupt periods of continued sitting every 45 minutes with five minutes of light-intensity walking which will be completed for three weeks during working hours, such as Monday to Friday, 9am to 5pm. The overall aim of this study is to determine whether it is feasible to break up people's sitting time in this way as an intervention for health.

What will I have to do?

You will be asked to read this information sheet and sign an informed consent form via an online survey software called Qualtrics. After you have provided your informed consent, a member of the research team will arrange a day and time that is suitable for you to pick up the physical activity monitor (ActivPAL 3M) from the Department of Physical Education and Sport Science building, at the University of Limerick. If you are unable to collect and return the physical activity monitor due to current COVID-19 regulations, we will arrange the delivery and return of the ActivPAL with you. This device will be placed on the midline of your right thigh, held in place by a sticky transparent material called Tegaderm (see picture). We will provide instructional information and an online video call to help you place and secure the ActivPAL device on your thigh. You will be asked to wear the ActivPAL from its collection/arrival for the next full seven days (nine days of wear), without the removal of this device (except for swimming) and complete your normal activities of daily living. A member of the research team will arrange a time that is suitable for you to return the physical activity monitor and pick up your next ActivPAL device. You will wear this second physical activity monitor for another consecutive seven full days, from when you take the first device off until you can meet at the University of Limerick to return and pick up your new ActivPAL for the week. If you are unable to travel due to COVID-19 regulations, we will discuss and arrange delivery with you on an ongoing basis throughout the six weeks.



Following the three weeks of wearing the ActivPAL monitor we will ask you to download a free chrome extension for your laptop/computer called 'Break Timer' this software will act as a pop up to

remind you to complete the five-minutes of walking after 45 minutes of work. The 'Break Timer' software can be set to your working hours so it will only appear when you are scheduled to work. We will ask you carry on your daily activities as you have for the previous three weeks but for the next three weeks we would instruct you to follow the schedule of the 'Break Timer' software and complete five-minutes of walking after 45 minutes of work during the working week. We will continue to arrange with you, the collection of a new ActivPAL every week for the three weeks of the walking program and ask you to complete the scheduled walking breaks and wear the monitor for the duration of the week.

During the study we will ask you to keep a 'logbook diary' of your daily activity timings such as noting down the time you: wake up, sleep, begin work, have lunch, finish work and any times you take of your ActivPAL monitor. This is to allow us to better understand the ActivPAL data and ensure we are capturing the correct activities at the correct time. We will provide an Excel document either online or printed as the 'logbook diary', whichever option is to your preference.

Every Wednesday of this research study between 12pm and 5pm we would ask you to complete four short cognitive function tests, these will be found online, and we will send you direct links to each test. If Wednesday does not suit your work schedule this can be personalised to yourself. It should take six to eight minutes to complete all four tests, we will ask that you send us a print screen or photo of your results to Aidan.Buffey@ul.ie. Prior to the commencement of the study we will explain the tests in detail, over video, along with any other information related to this study and prior to the first week of the study we will ask you to complete the four tests three times to become acquainted with the tests and the process of sending your results to the research team.

What are the benefits?

There are no financial benefits from taking part in this research however we will provide feedback on the amount of time you spend physically active and to what intensity, as well as the amount of time you spent sitting. You may experience small positive health benefits by completing the walking program due to the increase in walking a reduction in sitting and breaking the length of time spent sitting in one duration. Your participation will benefit future research and inform a larger study focused on breaking prolonged sitting.

What are the risks?

This risks to participating in this study are minimal, the greatest risk is related to falls when walking around your household, however we will advise you to walk in an unobstructed area of your house and at a light intensity. In regard to COVID-19 we will take precautions when exchanging the ActivPAL with you; we will sterilise the device using alcohol, whilst wearing appropriate protective equipment such as gloves and a face mask, and we will store the sterile device for two weeks prior to it being re-used.

What if I do not want to take part?

Participation in this study is voluntary and you can choose not to take part or to stop your involvement in this study at any time.

What happens to the information?

The data that is collected will be kept private and stored securely and safely on the researchers' computer in a locked office. The computers are encrypted, and password protected. Your name will not appear on any information and your data will be stored under a pseudonymised code.

Who else is taking part?

We aim to recruit 122 individuals (30-67 years of age) from the staff at the University of Limerick and individuals interested in their physical activity whose primary occupation is office based and who are working from home.

What if something goes wrong?

In the unlikely event that something goes wrong, the study will immediately stop, and the PESS department emergency procedures will be followed.

What happens at the end of the study?

At the end of the study the data collected will be used to present results. The information will be completely pseudonymised. No names will appear in any of the results. All data gathered from the research will be stored securely and safely by the researcher (Aidan Buffey) in their locked office. Information that is stored on the computer will be stored by (Aidan Buffey) on an encrypted computer that is password protected.

What if I have more questions or do not understand something?

If you have any questions about the study, you may contact either of the researchers. It is important that you feel that all your questions have been answered.

What happens if I change my mind during the study?

At any stage should you feel that you want to stop taking part in the study, you are free to stop and take no further part. There are no consequences for changing your mind about being in the study.

Contact name and number of Project Investigators.

Principal Investigator

Prof. Alan Donnelly,
PESS Dept. University of Limerick,
Email: Alan.Donnelly@ul.ie
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Other Investigators

Dr Brian Carson and Aidan Buffey
PESS Dept. University of Limerick
Contact email for study: Aidan.Buffey@ul.ie

Thank you for taking the time to read this. I would be grateful if you would consider participating in this study.

Yours sincerely,

Aidan Buffey

Participant Name

This research study has received Ethics approval from the Education and Health Sciences Research Ethics Committee (2020_06_25_EHS).

If you have any concerns about this study and wish to contact someone independent, you may contact:

Chair Education and Health Sciences Research Ethics Committee

EHS Faculty Office

University of Limerick

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