

INFORMATION SHEET FOR PARTICIPANTS

REC Reference Number: BDM/10/11-72

Title of study: The Effect of Age on Balance Control

I would like to invite you to participate in this research project. You should only participate if you want to; choosing not to take part will not disadvantage you in any way. Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the following information carefully and discuss with others if you wish. Ask me if there is anything that is not clear or if you would like more information.

Ageing is associated with many changes including more difficulty in balance and an increased risk of falling, although it is not known why many falls happen. Older people often report that controlling balance is more difficult after being in a moving environment such as being in a car or bus.

It is not known whether age affects how well we can balance when exposed to movement. We use many ways to help control balance and one of them is vision which is also affected by age. Movement could disturb our balance control systems and make visual control more important.

We would like to know how much the movement affects the balance and also the role of vision as well as the attention demands in balance control.

We are looking for healthy volunteers in two age ranges- 18-40 years and also any age over 60. They should not have any known

neurological diseases, uncorrected visual impairments, a medical history of epilepsy, fainting or migraine, joint replacement, recent bone, joint, or muscle injury. The study involves coming to a laboratory in Shepherd's House at Guy's campus near London Bridge station, King's College London for one and a half hours at the most. We are doing three balance tests.

You will stand on a large platform that measures how much you sway in any direction. We will ask you to stand on two legs for 30 seconds and one leg for 10 seconds and step over the platform with your eyes open, then closed and finally when looking at a pattern of rotating dots.

These tests will be done before and after the movement which will be 5 bouts of 1 minute each standing on a vibrating platform. This is known as whole body vibration. It is a technique which is popular in gyms and fitness centres and is said to increase muscle strength and power and feels rather strange at first but people quickly get used to it. These tests also will be performed with and without noise background. It will be provided through stereo headphones through which is played a background of fairly constant traffic noise with intermittent sudden sounds such as car horns, sirens and shouting.

You will be also asked to complete two questionnaires; one is about any vertigo (dizziness, giddiness, light headedness or unsteadiness) experienced in a number of everyday situations, and the other one is about how concerned you are about the possibility of falling.

In any data that is analysed or presented you will be anonymous. We will be happy to give you a copy of the final report if you request this. If you agree we will keep your contact details for possible involvement in future studies that you may be suitable for.

It is up to you to decide whether to take part or not. If you decide to take part you are still free to withdraw at any time and without giving a reason. A decision to withdraw at any time, or a decision not to take part, will not affect the standard of care you receive. In addition to withdrawing yourself from the study, you may also withdraw any data/information you have already provided up until it analysed.

If you decide to take part you will be given this information sheet to keep and be asked to sign a consent form.

If this study has harmed you in any way you can contact King's College London through Professor Di Newham for further advice and information by email (di.newham@kcl.ac.uk) or phone (0207 848 6320)

If you are interested in participating in the study please contact: Ms Shu-Chun Lee
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