# Consent form

## Better balance

A research project aimed at investigating whether exercise can improve the balance.

## Background and purpose

Fall-related injuries involve major health problems for elderly people; they cause functional decline and increased mortality, as well as contribute to major healthcare costs for society. The number of events and consequences of falls is expected to increase globally with the growing number of elderly people. The detection and assessment of potential fall risk markers therefore has a very important significance from both an individual health and a socio-economic perspective.

In a recent study, we conducted measures of standing balance of 1,900 70-year-olds in the Umeå municipality area, where participants were placed on a force plate for 60 seconds and the center of gravity shift was measured. It was found that the 20% of participants with the greatest body sway had almost twice as high risk of falling compared to the 20% of participants who measured the shortest sway lengths, when follow-up on prospective cases of fall accidents was made after the study.

This study is a follow-up intervention study where we now want to investigate whether balance exercise can improve the body sway of participants with deviating balance measures, based on previous, already completed, measurements. By improving balance, potential falls can be prevented in the future, which otherwise would lead to minor injuries, thereby maintaining a functional ability in elderly individuals.

## Request and participation

Researches connected to various units at Umeå University and Västerbotten County Council want to investigate whether exercise for persons with great postural sway can improve measures balance in this age group. In the study, possible participants are randomly allocated into either an intervention group or a control group. You have been allocated into the intervention group, and are now requested to participate in this balance exercise study.

#### What does the balance exercise entail?

The study includes a 4-week long, periodized and progressively adjusted balance exercise, where you are gradually encouraged to challenge your balance through both static and dynamic balance exercises. At the start of the study, all participants are to answer a questionnaire with questions about perceived balance and confidence in their own balance. The survey consists of multiple-choice questions and is completed on the supplied paper.

The exercise program is performed in a group of 10 persons, three times a week, a total of 12 occasions and 30 minutes per session. After the exercise period is completed, outcome measurements are performed in line with those you have performed in the 70-year health examination study, such as balance tests, walking patterns, physical activity, and muscle strength. You will then gain access to the exercise program designed for improving the balance. All exercises included may also be offered via video playback with instructions in the future.

Follow-up occurs at 6, 12 and 24 months where you are contacted by phone and questions are asked whether you have fallen since the measures. Additionally, the previously mentioned questionnaire is also carried out.

Turn the page and read more about the project

## What does your participation entail?

Participation in this study is free, optional, and can be cancelled at any time without the need for you to state a reason. If you deed your results for future research, Umeå University is responsible for managing your personal information correctly. The data will be used to compile the results of the exercise study on a group-level, and no information will be able to be linked back to you personally. Your answers and results will be processed so that unauthorized persons are unable to access them, in accordance with the Personal Data Act (personuppgiftslagen, PuL). You may also cancel your participation at any time without it affecting future treatment. Even if you give your results to later research, you are entitled to once a year request information on stored data, and have any errors corrected. If you have any questions or concerns about the study, please call 090-7869820.

Balance exercise, like all forms of exercise, can pose a risk to injury such as a fall. Balance exercise is nevertheless a relatively safe exercise form, without any high-intensity, fast movements, which reduces the risk of you losing the balance or injuring yourself during exercise.

## Informed consent

- I confirm that I have received this written and other oral information on the research project Better Balance.
- I give my consent to participate in the Better Balance study and know that my participation is voluntary.
- I am aware that, at any time and without explanation, I can terminate my participation.
- I allow for my personal data to be handled and recorded according to the information I have received, and that the collected data is stored and handled electronically by the study supervisors.
- I give my approval that the results of the tests carried out in this study are used for research

The participants' signature	Name clarification	

The participants' social security number Year (four digits), month, day - NNNN