NATIONAL INSTITUTE FOR HEALTH AND WELFARE
FINLAND

FinTerveys • FinHälsa • FinHealth

INFORMATION FOR THE PARTICIPANT

National FinHealth Study

The purpose of the FinHealth Study is to collect up-to-date information on the health and well-being of adult residents in Finland, and on the factors influencing their health and well-being. Taking part in the study will provide you with important information on the state of your health. The data generated by the study can be used in

- Studying disease prevention and treatment,
- Promoting the functioning and well-being of Finnish people, and
- Improving Finnish health care and welfare services.

You have been chosen for the study by random selection from the Population Information System of the Population Register Centre. A total of 10,000 people aged 18 or over from different parts of Finland will be invited to participate in the study. **The participation of every person selected for the study is important for the compilation of reliable data.**

The study will be implemented by the National Institute for Health and Welfare (THL), a research and development institute under the Finnish Ministry of Social Affairs and Health. The study has been accepted by the Ethics Committee of the Hospital District of Helsinki and Uusimaa.

What examinations will You undergo?

Your appointment will take approximately 1.5–2 hours. The measurements that will be taken include:

- Height and weight,
- Waist and hip circumferences,
- Body composition (body fat percentage),
- Blood pressure, and
- Physical functioning (getting up from a chair, joint mobility, grip strength, memory and learning, and vision test).

Some subjects have also been chosen for a nutrition interview and a subsequent telephone interview, which will take approximately 45 minutes. Some subjects will be given an accelerometer at the appointment, which will be used to measure their physical activity and sleep over a period of seven days.

In addition to the measurements, research data will be gathered through questionnaires. The questionnaires are designed to describe health, illnesses, symptoms, habits, physical functioning, and use of health care services. Completing the enclosed form will take approximately 20 minutes, and filling in the forms given to you at your appointment will take an additional 30–60 minutes.

A blood sample will be taken in connection with the physical examination, which will be analysed, for example for

- Blood lipid values (total cholesterol, HDL cholesterol, triglycerides, apolipoproteins A-1 and B),
- Blood sugar values (glucose, HbA1c, i.e. glycated haemoglobin),
- Liver function (GGT, ALAT, ASAT),
- Inflammation marker (CRP), and
- Kidney function (urate and creatinine).

Some subjects will also be asked to provide a urine sample. Urine samples will be analysed for salt consumption, iodine intake, and kidney function.

The stored blood and urine samples may later be analysed for protective factors and risk factors for major chronic diseases (e.g. obesity, diabetes, cardiovascular disease, cancer, gastrointestinal diseases, musculoskeletal disorders, psychological and neurological disorders, asthma, and allergies). The DNA extracted from the blood sample can also be used to study the underlying genetics of chronic diseases.

At your appointment you will receive more information about the study and be asked to give written consent for the use of your data in the study. With your consent, your samples may be transferred into the THL Biobank, and you will also be asked to sign a consent form for this purpose at your appointment.

Why is Your participation important?

The study cannot be carried out without your help. The people chosen for the study form a miniature model of the population living in Finland. This is why your participation is just as important whether you feel yourself to be in full health or suffer from long-term illnesses. We ask you to participate in the study even if you feel that you will not benefit from it personally.

You can present the enclosed letter to your employer, suggesting that you could participate in the study during working hours. We will also provide you with proof of attendance if necessary.

Participation in the study is entirely voluntary. You can also cancel your participation in the study at any time by notifying the FinHealth contact persons. Any data collected from you will not be included in the study in these circumstances.

Did You know?

The research data gathered on participants in population studies are used for significant national purposes:

- Physicians' treatment guidelines for conditions such as hypertension, blood lipids, memory disorders, and obesity. The development of care recommendations requires information on the level of risk factors.
- Various online risk calculators have been developed for the assessment and promotion of individual health: a diabetes risk calculator, the FINRISK calculator, an arterial disease calculator, and a memory disorder risk calculator.
- National health programmes such as the Allergy Programme and the Obesity Programme utilizing the information from population studies.
- The results of population studies are used for the monitoring of micronutrients and vitamins obtained from food in order to prevent deficiencies. Deficiencies in the intake of vitamin D among the Finnish population have been successfully rectified by adding vitamin D to food fats and dairy products, and by updating the guidelines on the use of vitamin D supplements.

Research data obtained from population study participants have been invaluable for several internationally significant scientific breakthroughs:

- The risk of memory disorders can be reduced by healthy food choices, regular physical activity and exercising one's memory.
- Regarding the mechanisms of developing allergies, it is known that factors such as exposure to natural environments during childhood can protect against allergies.
- Studies of the human genome have isolated genes causing conditions such as lactose intolerance, high cholesterol, and cardiovascular disease. A genetic heart disease risk calculator for identifying the hereditary causes of cardiovascular disease is currently under development.
- Mortality from cardiovascular diseases among the working-age population has decreased by 82% since the 1970s. This is mostly due to lower blood pressure and cholesterol levels, and by a decrease in smoking.

For more information about important research results, please visit the website of the FinHealth study at www.thl.fi/finterveys.

What information will You get about the study results and when?

You will receive feedback on your results. Some of the feedback will be given at the appointment (e.g. blood pressure, height, weight, and vision test).

The results of the laboratory tests will be sent to you by post within approximately two months of the examination.

Once the results of all the subjects are available towards the end of 2017, we will send you your personal health profile, which will also include information on the average results of the population and on reference and target values. This will give you information on your results in comparison to your age group and gender. The feedback will also contain information on how to promote your health. You will receive separate feedback letters on the results of your nutrition and accelerometer measurements.

The results of individual gene studies are still difficult to interpret. For this reason, the results of such studies are, as a rule, not disclosed to participants. By participating in the study, you can nevertheless promote the study of the causes, prevalence, and heredity of chronic diseases.

What will happen to Your study results after the study?

THL is responsible for the research data and will store and process them in keeping with its obligation of confidentiality and in compliance with the Personal Data Act. The research material will be kept separate from the identity information on the subjects. THL is responsible for the storage of samples and other original research materials.

The purpose of the study is to develop methods for the prevention and treatment of major chronic diseases, so the samples and other original research material will be used for research that will span years. The duration of the study's follow-up phase is estimated at approximately 30 years. The research materials collected during the study may be used for follow-up studies even after this 30-year period, in which case a new opinion will be sought from the Ethics Committee of the Hospital District of Helsinki and Uusimaa and, if necessary, your consent for the use of the materials.

With your consent, your research results may be linked to register data obtained from various statistical authorities: THL (information on health care visits, procedures and treatments), the Social Insurance Institution of Finland (information on benefits and reimbursements), Statistics Finland (information on socio-economic position and causes of death), the Finnish Centre for Pensions (information on pensions, rehabilitation, and employment), the Finnish Tax Administration (taxation information), the Population Register Centre (name, date and place of birth, address information, gender, marital status, native language, citizenship), and the Ministry of Employment and the Economy (information on employment and activities for promoting employment). Specific approvals for the linking of data will be sought from each statistical authority.

The data and samples collected during the study may also be used in various collaborative research projects between THL and universities and research institutions in Finland, Europe, and outside Europe. The collected data may be released in coded form to national and international partners or to databases, also outside the EU or the EEA (e.g. to the United States, where the level of data protection may differ from that in the EU). Such cooperation is always subject to a written agreement between the National Institute for Health and Welfare and its partner. Some of the genetic data collected during the study may be stored in a pan-European databank in England or a databank at the US National Institute of Health, from where other researchers may request data for their own research.

The information and samples will be released to research partners without any identifying information, so that it is impossible to directly identify individual persons from the data. Use of the data for purposes other than the research described here requires an approval from the Ethics Committee, permits from the authorities, and your new consent.

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