

# Actions to reduce sedentary time in parents and their young children

|                                        |                                                               |                                                                                                   |
|----------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Submission date</b><br>16/09/2011   | <b>Recruitment status</b><br>No longer recruiting             | <input type="checkbox"/> Prospectively registered<br><input checked="" type="checkbox"/> Protocol |
| <b>Registration date</b><br>30/11/2011 | <b>Overall study status</b><br>Completed                      | <input type="checkbox"/> Statistical analysis plan<br><input checked="" type="checkbox"/> Results |
| <b>Last Edited</b><br>20/12/2016       | <b>Condition category</b><br>Mental and Behavioural Disorders | <input type="checkbox"/> Individual participant data                                              |

## Plain English summary of protocol

### Background and study aims

There is enough evidence showing that we should be more active. This study examines how personalised counselling (including a half an hour lecture followed by face-to-face discussions with the researchers) can reduce sedentary time, and what impact this will have on health.

### Who can participate?

The study participants are recruited via daycare centres and primary schools in the Jyväskylä region in Finland. Eligible participants are parents of 3-8 year old children having an occupation where they sit more than 50% of their work time. The adults are to be healthy without chronic metabolic or musculoskeletal diseases. The children should be in all-day daycare and should not have developmental or other disorders delaying motor development.

### What does the study involve?

The participants are randomly allocated to one of two groups: one receiving personalised counselling at the beginning of the study and the other receiving the counselling at the end of the study. During counselling the parents commit themselves to spending less time in a sitting position and to increasing physical activity during work and leisure time for one year. During leisure time the parents are guided to ensure that children are more active. The participants undergo various tests 5 times a year including physical activity measurements and blood sampling. Physical activity level and motor skills will be measured in children.

### What are the possible benefits and risks of participating?

Adult participants will receive information on their health, daily physical activity, body composition, muscle strength and diet. Feedback of childrens physical activity and motor skills will be given. All the subjects will receive tips for increasing physical activity in everyday life. The tests include venous blood samples that sometimes can cause bruising inside of the elbow. Dual energy x-ray absorptiometry is used three times during the study to measure body composition. This procedure results in a radiation dose that corresponds to the amount people typically are exposed to during 2.4 hours in Finland. Heart rate will be measured by placing two electrodes on the chest. Electrodes are also used to measure thigh muscle electrical activity. The

electrodes contain a gel that may cause skin irritation or allergic reaction (this is rare). Physical activity measurements include maximal contractions that are done after a warm-up. These tests may cause muscle or tendon strains but the risk is no greater than in normal exercise at the gym.

Where is the study run from?

The study is conducted at the Department of Biology of Physical Activity, University of Jyväskylä, Finland

When is the study starting and how long is it expected to run for?

From April 2011 to December 2014

Who is funding the study?

Finnish Ministry of Education and Culture

Who is the main contact?

Prof. Taija Juutinen Finni

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## Contact information

### Type(s)

Scientific

### Contact name

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40014

## Additional identifiers

## Study information

### Scientific Title

Tailored Counseling to Increase non-exercise Physical Activity in adults with a sedentary job and in their young children: A year-long randomized controlled trial

### Acronym

InPACT

### Study objectives

1. Counseling increases physical activity and decreases muscle inactivity time during workday and leisure time in adults
2. Counseling induces behavioral changes that last over 6 months maintenance period
3. There is transfer effect of parental counseling so that also the childrens physical activity increases

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Ethics committee of Central Finland Health Care District approved on 25 March 2011 (Dnro 6U/2011)

**Primary study design**

Interventional

**Study design**

Single-center randomized controlled trial

**Study type(s)**

Prevention

**Health condition(s) or problem(s) studied**

Physical inactivity and sedentary work

**Interventions**

Intervention group receives tailored counseling with a half-an-hour common lecture followed by face-to-face discussion with the researcher that results in signing the agreement of the behavioral changes. The intervention is reinforced in the first six months by phone calls and e-mails and the following six months are maintenance period.

Control group undergoes the same assessments but receives no tailored counseling.

**Intervention Type**

Other

**Phase**

Not Applicable

**Primary outcome(s)**

1. From children, physical activity level is assessed five times a year using triaxial accelerometers that are worn on the waist for one week during waking hours
2. From adults accelerometer data is also assessed 5\*1 week during the year
- 2.1. From adults also heart rate and thigh muscle electrical activity are measured for shorter periods of time

**Key secondary outcome(s)**

1. From adults:
  - 1.1. Venous blood samples
  - 1.2. Body composition
  - 1.3. 12-month physical activity questionnaire
  - 1.4. RAND-36
  - 1.5. Work Ability Index and Occupational Stress Questionnaire (Finnish Institute of Occupational Health)
2. Children's fundamental motor skills are evaluated three times during the year

**Completion date**

15/12/2014

## Eligibility

### Key inclusion criteria

1. Healthy men and women with children 3-8 years old
2. Having work where they sit more than 50% of their work time
3. Children in all-day daycare and at least 10 days per month

### Participant type(s)

Patient

### Healthy volunteers allowed

No

### Age group

Adult

### Sex

All

### Key exclusion criteria

1. Self-reported chronic, long-term musculoskeletal disease or progressive neurological disease, diagnosed cardiovascular or metabolic disease with regular medication
2. Families with pregnant mother at baseline and body mass index (BMI) > 35
3. Children with a developmental disorder or other disorders delaying motor development

### Date of first enrolment

01/04/2011

### Date of final enrolment

15/12/2014

## Locations

### Countries of recruitment

Finland

### Study participating centre

PO Box 35

Jyväskylä

Finland

40014

## Sponsor information

**Organisation**

University of Jyväskylä (Finland)

**ROR**

<https://ror.org/05n3dz165>

**Funder(s)****Funder type**

Government

**Funder Name**

Ministry of Education and Culture (Finland) (42/627/2010)

**Results and Publications****Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Not provided at time of registration

**Study outputs**

| Output type                      | Details       | Date created | Date added | Peer reviewed? | Patient-facing? |
|----------------------------------|---------------|--------------|------------|----------------|-----------------|
| <a href="#">Results article</a>  | results       | 01/01/2014   |            | Yes            | No              |
| <a href="#">Results article</a>  | results       | 01/04/2014   |            | Yes            | No              |
| <a href="#">Results article</a>  | results       | 01/11/2014   |            | Yes            | No              |
| <a href="#">Results article</a>  | results       | 01/06/2015   |            | Yes            | No              |
| <a href="#">Results article</a>  | results       | 26/10/2015   |            | Yes            | No              |
| <a href="#">Results article</a>  | results       | 01/11/2016   |            | Yes            | No              |
| <a href="#">Protocol article</a> | protocol      | 20/12/2011   |            | Yes            | No              |
| <a href="#">Study website</a>    | Study website | 11/11/2025   | 11/11/2025 | No             | Yes             |