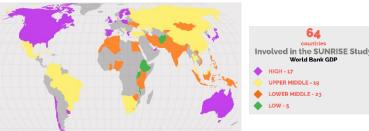
# Does your child meet the Movement Guidelines?

**International Study of Movement Behaviours in the Early Years** A study conducted by researchers at Early Start, UOW and Folkhälsan Research Center





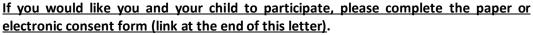
# Involved in the SUNRISE Study World Bank GDP

# The Researchers, who you can contact anytime with questions:

- Eva Roos, Principal Investigator: eva.roos@folkhalsan.fi, +358 50 407 6382
- Elina Engberg, Postdoctoral Researcher: elina.engberg@folkhalsan.fi, +358 44 788 3738
- Hanna Paasio, Project Coordinator: hanna.paasio@folkhalsan.fi, +358 44 788 5960
- Professor Anthony Okely (University of Wollongong, Australia) sunrise-uowcentre@uow.edu.au, +612 4221 4641

#### Why this information sheet?

We would like to invite you and your child to participate in the SUNRISE study. This International Study of Movement Behaviours in the Early Years is being conducted in multiple countries. In Finland, this study is being led by researchers from Folkhälsan Research Center in collaboration with the University of Wollongong, Australia. Altogether 1,000 children from Finland participate in the study.





#### **Background of the research**

Consider a young child's physical and motor development in the context of how they move throughout a typical day. It is usually a combination of sleep, sitting, standing, and different intensities of physical activity, the latter mostly in the form of play and other activities in daily life. We know little about how these behaviours individually and in combination – influence one another and how they relate to healthy growth and development.





#### Benefits and funding of the research

The primary aim of the SUNRISE Study is to determine the proportion of 3- and 4-year-old children who meet the World Health Organization (WHO) Global 24-hour Movement Guidelines for the Early Years in participating countries. This research will also:

- 1. Determine if the proportions of children meeting the guidelines differ by sex, household education levels, urban/rural setting, or country income levels.
- 2. Investigate if meeting the WHO guidelines and movement behaviours are associated with health and developmental outcomes and psychosocial wellbeing
- 3. Identify potential factors associated with the movement behaviours and meeting the guidelines (related to child and parental health, parental mental wellbeing, child's living environment, and day-care centre's environment).

The results of this study may be reported at conferences, published in academic journals, and used to apply for future funding. In all cases, data will only be reported in a pseudonymized aggregate form. The findings from the study will contribute to global evidence on movement behaviours in children.

The coordination of this study has been funded in Australia by an NHMRC Investigator Grant and in Finland by Ministry of Education and Culture, Juho Vainio Foundation, and Signe & Ane Gyllenberg Foundation.

# What does participation involve?

Your child will be asked to do various activities with a data collector (jumping, balancing, running). The data collectors will also measure your child's height, weight, waist circumference, grip strength and observe the playing of some iPad games. The iPad games are enjoyable for children and allow us to assess some of their cognitive abilities



such as working memory. In total, these assessments will take 20-40 minutes to complete per child. You can read more information about the measurements at the following address:



https://www.folkhalsan.fi/en/knowledge/research/public-health/sunrise/main-study/ Your child will be asked to wear two lightweight activity monitors for 7 days to measure their physical activity: 1) a small monitor on a strap to wear around their non-dominant wrist (like a watch), needs to be worn all day except in sauna; and 2) a monitor on a belt, which needs to be worn all day except for during water-based activities or in sauna. The activity monitors do not record the location of the child.

In addition, you will be asked to complete two (2) paper or electronic parent questionnaires which will include demographic information such as age, sex, address and some questions about your and your child's health behaviours, including sleep, screen time and nutrition. It should take parents 15-30 minutes to complete each questionnaire. In total, it will take around 45-60 minutes to complete the two questionnaires, and you can complete the two questionnaires at different times. All questionnaires can be completed in either Finnish, Swedish or English. The international questionnaire includes some sensitive questions about food insecurity. For example, "Do you ever cut the size of meals or skip meals because there is not enough money for food?" The questionnaire also includes questions about food sources. For example, "Do you ever give your child money to buy food?" In addition, the other questionnaire includes questions about your mental well-being (related to symptoms of depression, anxiety, stress, insomnia and mobile phone and social media use) and your child's psychosocial wellbeing and physical fitness. You have the right to refuse to answer any questions. In addition, one parent/caregiver will be asked to complete an activity monitor diary for the child.





#### Participating entails few risks

Apart from the time taken to participate, we foresee very few risks in participating in this research. You and your child's involvement in this study is voluntary and you, or they, may decline to participate at any time. Simply notify the researcher if you wish to withdraw from the study. This will not affect your relationship with your centre, the researchers, Folkhälsan Research Center or the University of Wollongong. Note that all data collected will be transferred and stored securely at the Folkhälsan Research Center and at the University of Wollongong and kept strictly confidential. You or your child will not be identified in any part of the research.

## Research findings and future use of the information collected

The aggregated results of children's measurements will be reported back to you in a daycare centre or regional level. If requested, it is also possible for the parent to receive results of individual children from accelerometer measurements. The pseudonymized data collected from your child will be aggregated by country and compared with other participating countries regarding the proportion of children meeting 24-hour movement guidelines (e.g., % of children in your country who meet the guidelines, vs. % of children in another country who meet the guidelines). The collected information will primarily be used by the Chief Investigator/s in each country and the SUNRISE Coordinating Centre Data Management team for the study aims described above.

In the Finnish study, Geographic Information System (GIS) analyses will be used to examine environmental features of your residence and day-care centre's nearby location. In addition, in the Finnish study, we will use information from the national registers with the permission of the authorities to supplement the information collected in the study. Participation in the registry studies requires you to provide your and your child's personal identification numbers in the questionnaire, which is optional. Registry information such as background information of children and parents (such as education, place of residence) and health-related information (such as illnesses) will be collected from the following registrars: Digital and Population Data Services Agency, Statistics Finland, Social Insurance Institution of Finland (KELA), Kanta Services (The Social Insurance Institution of Finland), Finnish Institute for Health and Welfare (THL), (The Register of Primary Health Care Visits (Avohilmo), Care Register for Health Care (HILMO) and Medical Birth Register). Such data is classified as sensitive under the Data Protection Regulation and will be protected with particular care during processing. We will further inform you about the content of the registry inquiries by e-mail and on our website when they are up to date. You can also, at any time, refuse to participate in the registry studies but still participate in the SUNRISE Finland study in other respects.

In Finland, we will establish a cohort (research data) of the study participants and follow them up in the future. In follow-up studies, we examine movement behaviours of the children when they are older. We will send invitations to these follow-up studies at a later date, which you and your child will have the opportunity to decline. We will inform you about future follow-up studies on our website. We ask for ethical evaluations for both registry and follow-up studies before they are conducted. In addition, permission is sought from the authorities (Findata) for the use of registry materials.

In addition, it may be of interest to investigate new research questions in the future, possibly with other researchers. Pseudonymized data can thus be shared with other researchers for research purposes compatible with this original study. New type of use of the data always requires a new ethical evaluation and informing the research participants about the use of the data. Information about the new use of international and Finnish research data is available at: <a href="https://sunrise-study.com/">https://sunrise-study.com/</a> and <a href="https://sunrise/">https://sunrise/</a> Deidentified data may also be published in an open database/repository when required by publishers. Any personally identifying information will be removed from the data, and it will not be possible to identify you or your child.





#### Research data protection

All information that you and your child provide is protected by confidentiality and everyone who works with the study has a duty to confidentiality. Your answers and results will be processed so that unauthorized persons cannot take part in them. Personal data is handled in accordance with the European Data Protection Regulation (GDPR). The legal basis for the handling of personal data in this study is "data of general interest". You can read the data protection statement on our website: <a href="https://www.folkhalsan.fi/globalassets/forskning/dokument/sunrise-data-protection-policy-statement\_eng\_final.pdf">https://www.folkhalsan.fi/globalassets/forskning/dokument/sunrise-data-protection-policy-statement\_eng\_final.pdf</a>. Possible changes in the data protection statement will be posted for your information on the website. The party responsible for personal data is Samfundet Folkhälsan i svenska Finland r.f. (see contact details).

#### **Next steps to participation**

If you feel that you have sufficient information about the study and do not have any further questions, please go to the **consent form link** (below) and start by checking a box on whether you would like to participate. You can continue by filling in the questionnaire once you have given your consent to participate in the study. If you have any further questions, please feel free to contact the researchers at the address: **sunrise@folkhalsan.fi.** 

#### **Ethics review and complaints**

This study has been reviewed by the Folkhälsan Research Center's Ethical Review Board in Humanities (FH1/2022\_0703) and by the Human Research Ethics Committee (Social Science) of the University of Wollongong (approval number 2019/378). If you have any concerns or complaints regarding the way the research is or has been conducted, you can contact the UOW Ethics Officer on +612 4221 3386 or e-mail rso-ethics@uow.edu.au. Should you require any further information, please do not hesitate to contact members of the research team.

Link to the consent: <a href="https://link.webropolsurveys.com/S/A3BD0BB3D5FAA832">https://link.webropolsurveys.com/S/A3BD0BB3D5FAA832</a>

You can find more information about the international SUNRISE Study at <a href="https://sunrise-study.com/">https://sunrise-study.com/</a> and about the SUNRISE Finland Study <a href="https://www.folkhalsan.fi/en/sunrise/">https://www.folkhalsan.fi/en/sunrise/</a>



