# The Odense Preschool study, TOPS

# Physical Activity among Preschool Children in Odense Municipality.

In the autumn of 2008 a health and interdisciplinary research project has begun including about 650 5-6-year-old children attending 43 randomly selected preschools in Odense Municipality.

## **Purpose**

The purpose of carrying out this study in different preschools is a wish to determine factors having implications for physical activity and their impact on children's well-being, health and development.

Data is collected in 43 randomly selected preschools in Odense Municipality. The project is a mixed method study with 3 phd students using different scientific approaches/methods. In my part of the project, I investigate determinants of physical activity in preschools and the association between physical activity and motor development.

### Who is responsible for the project?

The project is conducted by staff and PhD Students at the Centre for Research in Childhood Health (RICH), University of Southern Denmark. The head of the Centre, Karsten Froberg, is also the project manager.

#### **Timetable**

The project started in August 2008 and is expected to run until 2013. Within the first year all the preschools have been visited and different types of data have been collected.

# In my part of the study the following data (nr. 1-6) have been collected?

- 1. The parents of the 5-year-old children have been answering a questionnaire concerning the health and lifestyle of the family.
- 2. The staffs in all preschools has also been answering a questionnaire about their physical activity, lifestyle, pedagogical considerations, planning of activities, trips to outdoor areas, etc.
- 3. The children's height, weight and waist circumference has been measured.
- 4. Different motor tests were performed on the children using the 'Körper Koordinationstest für Kinder (KTK) ', and parts of 'The Movement ABC-2 test'.
- 5. Activity patterns of the 5 to 6 year-old children, as well as the staff working with preschool children, have worn motion sensors in a period of one week. The motion sensors detect activity and activity intensity.

- 6. The area of the preschools was measured and the environment and facilities on the playgrounds were registered.
- 7. All the Preschools were visited during autumn 2008. The pedagogical environment and children's possibilities for physical activity have been rated.
- 8. A few selected preschools were visited by project members for a longer period, doing more extensive observations of the daily life in the preschool. Observations were completed with the least possible intervention in the children's usual activities. During the observation period, interviews with children and staff concerning their well-being, and video observations of children's play in daily life, have taken place.
- 9. The parents of the 5-year-old children have been answering a questionnaire concerning the well-being of their child

#### Who are the researchers?

The researchers included in the project are PhD-students each having their focus area.

- Physical activity and motor skills, including overweight and obesity will be examined from a biological/exercise and health scientific perspective, by Line Grønholt Olesen (nr. 1-6).
- -The pedagogical processes and child development opportunities will be examined from a pedagogical and psychological perspective, by Hanne Værum Sørensen (nr. 7-8).
- -Well-being and pedagogical body culture will be examined from a health science and anthropological perspective, by Anette Boye Koch (nr. 8-9).

#### Pedagogues, children and parents

Implementation of the project is depending on the families', the children's and the staff's willingness to share what is happening in their daily lives and answer questions. The researchers have strived to be as least inconvenient to children and staff as possible. We have experienced great hospitality and goodwill and are very grateful for the big support to the project from children, parents and staff!

Similar studies in the childcare area in Denmark have not been carried through in the past. The information we are gathering will therefore create new knowledge concerning the requirements for Danish children to meet as good conditions as possible in the childcare system.

#### **Results**

The project will contribute with important new knowledge of issues affecting children's health and wellbeing. It may likewise contribute to the formulation of new guidelines for preventive health work for children and health promoting initiatives in the day care centers of children. The results will be disseminated to the pedagogical field, partly written through books / reports, and orally through participation in courses and conferences as well as on pedagogical training courses. Publications of the research will also be presented at national and international conferences and in scientific periodicals and journals. In publication of the results, the preschools, the staff, the children and their parents will be anonymous.

#### **Financing**

This part of the project currently receives financial support from TrygFonden and the University of Southern Denmark.

Further the Child and Youth Pedagogues Association (BUPL) is supporting the project with financial resources together with Odense Municipality, VIA University College (Jydsk and Peter Sabroe Seminariet, National Institute's for Social Educators in Århus) and the Knowledge Centre for Health, Diet and Exercise (KOSMOS).

#### **Information**

Ahead of each individual element of the project, information has been given to parents and staffs on the specific investigation activities, in which they are expected to participate. Where it has been required in the process, we have obtained written commitment from the parents.

The results of the children's personal study will be kept confidential, and no one but the child and

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the parent can get insight into these results.

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