

Uppsala Family Study

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Creator/Principal investigator(s)

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Research principal

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Description

The Uppsala Family Study was initiated in 2000-2001 when 602 families (mothers, fathers, two consecutive siblings age 5-14 years) living in Uppsala were examined with focus on anthropometry and blood pressure. Blood samples were taken for biochemical and genetic analyses. Parents answered medical and lifestyle questionnaires and filled in a medical questionnaire for each child. Families were randomly selected from a sampling frame where children were selected from the Medical Birth Registry based on them being consecutive singleton full siblings where both had high or low birth weight or where they were discordant in birth weight. In 2010-2014, all families were invited for a second round of examinations; 513 parents (age 39-70 years) and 466 children (age 14-23 years) attended. This second round of examinations included largely the same procedures as the first round; anthropometry, blood pressure, blood sampling, and all participants answered a detailed questionnaire on medical history, lifestyle habits including physical activity, education and living conditions. Additionally, participants underwent DXA-scans to determine bone, fat and lean muscle mass. Additional information available includes pregnancy specific information from the Medical Birth Registry (children), parental birth data and longitudinal information on children's growth from child and school health records. The family design of the Uppsala Family Study provides good opportunities to examine the contribution of maternal and paternal factors on, for instance, the association between birth weight and later outcomes in the offspring.

Purpose:

To study effects of birth weight and growth on cardiovascular, metabolic and bone-related outcomes using a family design.

Unit of analysis

[Individual](#)

Time Method

[Longitudinal: Cohort/Event-based](#)

Sampling procedure

[Probability](#)

Data format / data structure

[Numeric](#)

Data collection 1

- Mode of collection: Physical measurements and tests
- Time period(s) for data collection: 2000 – 2001
- Source of the data: Population group, Biological samples

Data collection 2

- Mode of collection: Self-administered questionnaire
- Time period(s) for data collection: 2000 – 2001
- Source of the data: Population group, Biological samples

Data collection 3

- Mode of collection: Self-administered questionnaire
- Time period(s) for data collection: 2010 – 2014
- Source of the data: Population group, Biological samples

Data collection 4

- Mode of collection: Physical measurements and tests
- Time period(s) for data collection: 2010 – 2014
- Source of the data: Population group, Biological samples

Responsible department/unit

Department of Surgical Sciences

Research area

[Medical and health sciences](#) (Standard för svensk indelning av forskningsämnen 2011)

[Health](#) (CESSDA Topic Classification)

Keywords

[Anthropometry](#), [Blood pressure](#), [Life style](#), [Health status](#), [Education](#), [Birth weight](#), [Growth](#), [Lifestyle factors](#), [Blood sample](#), [National register](#), [Swedish cohort consortium \(scc\)](#), [Cohorts.se](#)

Publications

Leon DA, Koupil I, Mann V, Tuvemo T, Lindmark G, Mohsen R, Byberg L, Lithell H. Fetal, developmental, and parental influences on childhood systolic blood pressure in 600 sib pairs: the Uppsala Family Study. *Circulation* 2005;112(22):3478-85. doi: 10.1161/CIRCULATIONAHA.104.497610

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Weedon MN, Frayling TM, Shields B, Knight B, Turner T, Metcalf BS, Voss L, Wilkin TJ, McCarthy A, Ben-Shlomo Y, Davey Smith G, Ring S, Jones R, Golding J, Byberg L, Mann V, Axelsson T, Syvänen AC, Leon D, Hattersley AT. Genetic regulation of birth weight and fasting glucose by a common polymorphism in the islet cell promoter of the glucokinase gene. *Diabetes* 2005;54(2):576-81. doi: 10.2337/diabetes.54.2.576

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Mann V, De Stavola BL, Leon DA. Separating within and between effects in family studies: an application to the study of blood pressure in children. *Stat Med* 2004; 23(17):2745-56.

Koupil I. The Uppsala studies on developmental origins of health and disease. *J Intern Med* 2007;261(5):426-36.

Accessibility level

Access to data through an external actor
Access to data is restricted

Contact for questions about the data

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