

# The Swedish Mammography Cohort (SMC) 1987

**SND-ID:** ext0018-1.

**Is part of collection at SND:** [Swedish Cohort Consortium \(Cohorts.se\)](#), [SIMPLER - Swedish Infrastructure for Medical Population-Based Life-Course and Environmental Research](#), [NEAR - National E-Infrastructure for Aging Research in Sweden](#)

## Associated documentation

COSM livsstilsenkät 2009.PDF (1.56 MB)

SMC Frågeformulär 1997.pdf (57.54 KB)

SMC Frågeformulär baseline 1987-1990.pdf (136.06 KB)

SMC Hälsoenkät 2008.pdf (56.46 KB)

The Swedish Mammography Cohort.pdf (352.89 KB)

## Citation

<https://www.simpler4health.se/researchers/publication-policy/>

## Creator/Principal investigator(s)

[Karl Michaëlsson](#) - Uppsala University, Department of Surgical Sciences

## Research principal

[Uppsala University](#) - Department of Surgical Science

## Description

The Swedish Mammography Cohort (SMC) is a large population-based cohort of over 60,000 women in the counties of Uppsala and Västmanland. All women born 1914-1948 who were residing in Västmanland and Uppsala County and in the years 1987-1990 received an invitation to participate in a mammography screening programme were asked to answer a questionnaire about diet and lifestyle. Approximately 66,000 women answered the questionnaire. In the autumn 1997, a second survey was sent to these women to update the information about their eating habits. Additional follow-ups were done 2008/2009 and 2019. The study examine associations of environmental/modifiable risk factors with several cancer sites (e.g., breast, colorectal, endometrium, ovary, and renal cell cancer), myocardial infarction, stroke, osteoporosis, cataracts, as well as death causes. The study has a longitudinal design, and to complement the update on exposure data record linkages to the nationwide Cancer Register, the In-Patient Register, and the Cause of Death Register and Population Register are also done.

The questionnaires used in the Swedish Mammography Cohort are the same as the ones that have been used in the Cohort of Swedish Men (COSM). For updated information on questionnaires and variable lists please visit <https://www.simpler4health.se/researchers/>.

Purpose:

The general aim of the Swedish Mammography Cohort (SMC) is to assess relationships between a number of modifiable factors (diet, vitamin supplement use, physical activity, smoking, alcohol, body weight, other anthropometric measures etc.) and the occurrence of several major chronic diseases.

For more detailed information please visit the SIMPLER website,  
<https://www.simpler4health.se/researchers/cohorts/>.

For restrictions in data use see <https://www.simpler4health.se/researchers/rules-and-guidelines/> and <https://www.simpler4health.se/researchers/publication-policy/>.

Women born between 1914 and 1948, and living in Västmanland county between 1987 and 1989 or living in Uppsala County between 1988 and 1990, received an invitation by mail to participate in a mammography screening program, in total 90,303 women. The invitation included a six-page questionnaire that sought information on diet and alcohol intake (67-item food frequency questionnaire), parity, age at first childbirth, family history of breast cancer, weight, height, education level, and marital status. The questionnaire can be found at <https://www.simpler4health.se/researchers/questionnaires/>.

### **Data contains personal data**

Yes

### **Sensitive personal data**

Yes

### **Type of personal data**

health data

### **Code key exists**

Yes

### **Language**

[English](#)

### **Population**

Women born 1914-1948 living in Västmanland or Uppsala County during 1987-1990.

### **Study design**

Observational study

Cohort study

### **Description of study design**

Longitudinal cohort study

### **Sampling procedure**

[Total universe/Complete enumeration](#)

From 1987 to 1990, all women who lived in the Uppsala County of central Sweden and were born between 1914-1948 and all women who lived in the adjacent Västmanland County and were born between 1917-1948 received an invitation by mail to participate in a mammography screening program. Included in the mail was also an invitation to participate in this research study and a questionnaire to be answered and returned. Follow-ups have been performed approximately every tenth year starting in 1997. At next follow-up, 2008/2009, the questionnaire was extended and

separated into two questionnaires. An additional follow-up was done during 2019.

### **Time period(s) investigated**

1987 - Ongoing

### **Biobank is connected to the study**

The study has collected samples/material which are stored in a scientific collection or biobank

Scientific collection or biobank name: Uppsala biobank/SIMPLER

Type(s) of sample: DNA

### **Response rate/participation rate**

74% / 90 303 women received the invitation, 66 651 answered the questionnaire and 61 433 participants remained after exclusions (wrong or missing personal number, cancer diagnosis etc.).

### **Data format / data structure**

[Numeric](#)

### **Data collection 1**

- Mode of collection: Self-administered questionnaire
- Description of the mode of collection: Specific date for collection.
- Time period(s) for data collection: 1987 - 1990
- Source of the data: Population group

### **Geographic spread**

Geographic location: [Sweden](#)

Geographic description: Uppsala and Västmanland counties, Sweden.

### **Lowest geographic unit**

Municipality

### **Highest geographic unit**

Country

### **Responsible department/unit**

Department of Surgical Science

### **Ethics Review**

Uppsala - Ref. 2018/262 och 2018/263

### **Research area**

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

[Clinical medicine](#) (Standard för svensk indelning av forskningsämnen 2011)

[Cancer and oncology](#) (Standard för svensk indelning av forskningsämnen 2011)

[Endocrinology and diabetes](#) (Standard för svensk indelning av forskningsämnen 2011)

[Cardiac and cardiovascular systems](#) (Standard för svensk indelning av forskningsämnen 2011)

[Orthopaedics](#) (Standard för svensk indelning av forskningsämnen 2011)

[Geriatrics](#) (Standard för svensk indelning av forskningsämnen 2011)

[General practice](#) (Standard för svensk indelning av forskningsämnen 2011)

[Public health, global health, social medicine and epidemiology](#) (Standard för svensk indelning av forskningsämnen 2011)

[Nutrition and dietetics](#) (Standard för svensk indelning av forskningsämnen 2011)

## Keywords

[Anthropometry](#), [Life style](#), [Follow-up studies](#), [Heart failure](#), [Longitudinal studies](#), [Prospective studies](#), [Exercise](#), [Population surveillance](#), [Osteoporosis](#), [Tinnitus](#), [Climacteric](#), [Arthritis, rheumatoid](#), [Drug therapy](#), [Hormone replacement therapy](#), [Risk factors](#), [Women's health](#), [Myocardial infarction](#), [Stroke](#), [Diet](#), [Alcohol drinking](#), [Asthma](#), [Fractures, bone](#), [Thrombosis](#), [Bronchitis, chronic](#), [Breast cyst](#), [Breast neoplasms](#), [Crohn disease](#), [Diabetes mellitus](#), [Cause of death](#), [Eczema](#), [Reproductive history](#), [Intermittent claudication](#), [Gallstones](#), [Pregnancy](#), [Cataract](#), [Glaucoma](#), [Dermatitis, atopic](#), [Health](#), [Hypertension](#), [Irritable bowel syndrome](#), [Cholesterol](#), [Pulmonary disease, chronic obstructive](#), [Body height](#), [Body weight](#), [Angina pectoris](#), [Arthralgia](#), [Uterine neoplasms](#), [Gastritis](#), [Mammography](#), [Menstruation](#), [Migraine disorders](#), [Environmental medicine](#), [Multiple sclerosis](#), [Oral health](#), [Depression](#), [Kidney calculi](#), [Kidney neoplasms](#), [Parkinson disease](#), [Contraceptive agents](#), [Psoriasis](#), [Registries](#), [Rhinitis, allergic, seasonal](#), [Smoking](#), [Social support](#), [Stress, psychological](#), [Sleep](#), [Colitis, ulcerative](#), [Vitamins](#), [Vertigo](#), [Ovarian neoplasms](#), [Heredity](#), [Hypersensitivity](#), [Medical history taking](#), [Cohort studies](#), [Vision, ocular](#), [Drug utilization](#), [Survival](#), [Hearing](#), [Lung neoplasms](#), [Work](#), [Disease](#), [Obesity](#), [Dietary supplements](#), [Health status](#), [Colonic neoplasms](#), [Leisure activities](#), [Cohorts.se](#), [Swedish cohort consortium \(scc\)](#), [Near - national e-infrastructure for aging research](#)

## Publications

Harris H, Håkansson N, Olofsson C, Julin B, Åkesson A, Wolk A. The Swedish Mammography Cohort and the Cohort of Swedish Men: Study design and characteristics of 2 population-based longitudinal cohorts. *OA Epidemiology*;1(2):16, 2013.

**DOI:** <https://doi.org/10.13172/2053-079X-1-2-943>

## Link to publication list:

[Publications SIMPLER](#)

If you have published anything based on these data, [please notify us](#) with a reference to your publication(s). If you are responsible for the catalogue entry, you can update the metadata/data description in DORIS.

## Accessibility level

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

## Homepage

[SIMPLER's webpage](#)

[For researchers](#)

[NEAR platform – SMC](#)

## Contact for questions about the data

SIMPLER

[simpler@surgsci.uu.se](mailto:simpler@surgsci.uu.se)

### **Related research data in SND's catalogue**

[The Cohort of Swedish Men \(COSM\) - The Cohort of Swedish Men, COSM 1997](#)

[The Swedish Mammography Cohort \(SMC\) 1997](#)

[The Swedish Mammography Cohort \(SMC\) 2008 health](#)

[The Swedish Mammography Cohort \(SMC\) 2009 lifestyle](#)

[The Cohort of Swedish Men \(COSM\) - The Cohort of Swedish Men, COSM 2008 health](#)

[The Cohort of Swedish Men \(COSM\) - The Cohort of Swedish Men, COSM 2009 lifestyle](#)

[The Swedish Mammography Cohort \(SMC\) 2019 lifestyle](#)

[The Swedish Mammography Cohort \(SMC\) 2019 health](#)

[The Cohort of Swedish Men \(COSM\) - The Cohort of Swedish Men, COSM 2019 health](#)

[The Cohort of Swedish Men \(COSM\) - The Cohort of Swedish Men, COSM 2019 lifestyle](#)

[The Swedish Mammography Cohort Clinical Subcohorts \(SMC Clinical Subcohorts\) - SMC Clinical Subcohort visit 1 Uppsala \(2003-2009\)](#)

[The Swedish Mammography Cohort Clinical Subcohorts \(SMC Clinical Subcohorts\) - SMC Clinical Subcohort visit 2 Uppsala \(2015--\)](#)

[The Swedish Mammography Cohort Clinical Subcohorts \(SMC Clinical Subcohorts\) - SMC Clinical Subcohort visit 1 Västerås \(2010-2019\)](#)

[The Cohort of Swedish Men Clinical Subcohorts \(COSM Clinical Subcohorts\) - COSM Clinical Subcohort visit 1 Västerås \(2010-2019\)](#)

[The Cohort of Swedish Men Clinical Subcohorts \(COSM Clinical Subcohorts\) - COSM Clinical Subcohort Örebro \(2014--\)](#)

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