

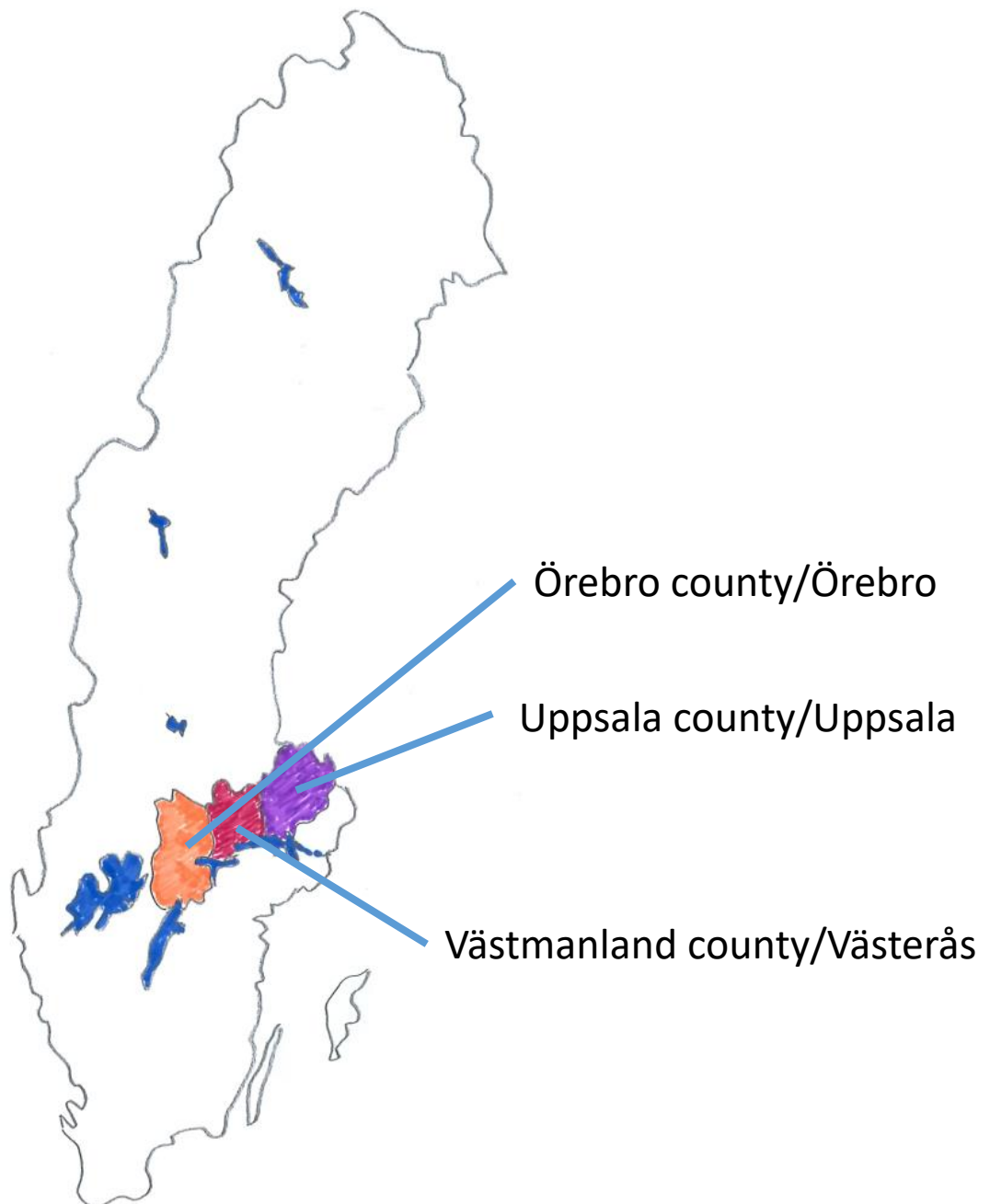
Supplementary information 1 and 2

SIMPLER - the Swedish Infrastructure for Medical Population-based Life-course and Environmental Research

Eva Warensjö Lemming, PhD, Frida Carlsson, RD, MSc, Diem Nguyen, PhD, Caesar Al Jewari, PhD, Carl Brunius, PhD, Liisa Byberg, PhD, Lars Engstrand, MD, PhD, Tuulia Hyötylainen, PhD, Niclas Håkansson, PhD, Ingegerd Johansson, PhD, Anna-Karin Kolseth, PhD, Rikard Landberg, PhD, Susanna C Larsson, PhD, Jerzy Leppert, MD, PhD, Marina Mola-Caminal, PhD, Erika Olsson, RD, PhD, Sergi Sayols-Baixeras, PhD, Agneta Åkesson, PhD, Alicja Wolk PhD, Karl Michaëlsson, MD, PhD

Supplementary information 1

The participants in the study cohorts, Swedish Mammography Cohort and the Cohort of Swedish Men, all lived in three adjacent counties in Sweden, depicted in the map. The physical examination was performed in the cities of Uppsala and Västerås.



Supplementary information 2. Questionnaire development

- Further information on the questionnaire can be found here: <https://www.simpler4health.se/>
- The subcohorts Swedish Mammography Cohort Comprehensive subcohort (SMCC) and Cohort of Swedish Men Comprehensive subcohort (COSMC) started in 2003 and 2010 respectively. Participants were invited to an in-person health examination and were asked to answer a questionnaire assessing diet and lifestyle before their visit (1-3 months).
- The launch of SMCC in Uppsala coincided with a comprehensive development of the questionnaires. Consequently, different versions of questionnaires assessing lifestyle and diet (during the past year) together with varying supplemental questionnaires assessing health and sun habits, were used for SMCC-Uppsala, cycle 1 (SMCC-U1). From 2010 onwards, a modified version of the Lifestyle questionnaire used in SMC and COSM, revised to assess diet and lifestyle during the past month (instead of the past year), and a 1-day food record were used in both subcohorts in Uppsala and Västerås. From 2013 onwards, a toilet habit questionnaire was added for both subcohorts on all sites. In Västerås, the 2008 Health questionnaire was added for both subcohorts from 2015 onwards.
- From September 2003 through June 2004, the first 465 SMCC-U1 participants received a 97-item FFQ, assessing dietary and alcohol intake during the past year. It was identical to the FFQ section in the 1997 questionnaire but with one additional food item; flax seeds.
- Subsequently, in 2004, the 1997-questionnaire was improved and extended, resulting in a new version – the Lifestyle–v.2004:1, assessing lifestyle and diet during the past year. Thirty-one food items in the FFQ section were added, while questions on weight history, gynecology, urology, and family composition were excluded. Between September 2004 and March 2009, the majority of SMCC-U1 participants received the FFQ-2004-V1 (n=4 366). Approximately 10% of the respondents received a version with 120 food items instead of 122. It contained one item for wine instead of two separate items; red wine and white wine. Similarly, one item for nuts/almond was included instead of two items; peanuts and nuts/almonds
- The FFQ-2004-V1 was further improved and a second version was completed in 2009 – the Lifestyle v.2004:2. The FFQ section was extended with thirty-two food items. A battery of questions on eating habits were added, including: main type of diet; diet exclusions; portion sizes; meal habits/frequency; fried food intake; and sweets intake during childhood. Questions on smoking, medication use, and sun habits were added while questions on sleeping duration, physical activity history, hip/waist circumference, and weight were excluded. Between March and September 2009, 119 SMCC-U1 participants answered the FFQ-2004-V2.
- The final version, 2009 Lifestyle, completed in the spring of 2009, was essentially the same as the FFQ 2004-V2, with minor modifications. Questions on passive smoking were excluded, questions on outdoor activities added, and one food item (sardines) was added in the FFQ section. The 2009 Lifestyle questionnaire was designed to be used in SMC and COSM and was sent to all participants in in these two cohorts in 2009. However, it was also used in the subcohorts for a small group of SMCC-U1 participants (n=58) who had answered the 2009 Lifestyle questionnaire shortly before the clinical visit and were therefore not asked to answer any additional FFQ/Lifestyle questionnaire before the health examination visit.