Additional File 1: Covariables

Information on academic and professional qualification was used to determine the **educational status** [1]. The Comparative Analysis of Social Mobility in Industrial Nations (CASMIN) classification system [2] was used for classification into three groups: "low", "medium", and "high".

Smoking was assed using four categories ("yes, daily", "yes, occasionally", "ex-smoker", "never") [3]. For the present analyses, **current smoking** was categorized as "no", "occasionally", and "daily".

The questions regarding **physical activity** referred to the last three months [4]. The participants were asked how many days per week and how long they are physically active on average. The information obtained from both questions was combined to estimate the proportion of those who fulfil the WHO recommendation of at least 2.5 hours per week [5].

A semi-quantitative self-administered food frequency questionnaire was used to assess frequency and portion size of non-alcoholic-beer, beer, wine, spirits, cocktails (during the last 4 weeks). Daily alcohol consumption was calculated by summing the alcohol content of these beverages. **Alcohol consumption** was defined as: never (0g), moderate: (0-$\leq$ 10g in women and 0-$\leq$ 20g in men), and high (> 10g in women and > 20g in men) [6].

Previous physician-diagnosis of cancer, myocardial infarction, stroke asthma, coronary heart disease, chronic heart failure, asthma and musculoskeletal conditions were assessed using a standardized computer-assisted personal interview [7]. Trained study physicians asked the participants whether a physician had ever told them that they had the respective disease or health problem. Furthermore, participants were asked for additional diseases requiring current treatment. **Comorbidity** was defined as reporting at least one of the physician-diagnosed conditions or self-reported gallbladder disease.

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