# Supplementary material for manuscript ‘Trends of colorectal cancer incidence by education and socioeconomic status in Finland’.

## Description of the variable categorization

Education variable:

Education level was based on information of the highest achieved degree from 1975, 1985, 1990, 1995, 2000, and from 2004 on from every year. The data were divided into three categories: basic (lasting typically less than 10 years), secondary (10–12 years) and high education (13 years or more), according to information on education based on the latest data prior to each calendar year. The group with the lowest education level was created from those who had no information on degrees, because the education data included only secondary degrees and higher degrees. Those younger than 25 years were excluded (485 cases) from the analyses, because children and young adults often have not received their highest education level.

Socioeconomic variable:

Information on the socioeconomic status was received from 1975, 1985, 1995, 2000, and from 2004 on from every year. Persons were divided into seven groups based on their latest socioeconomic status: self-employed, upper-level employees, lower-level employees, manual workers, students, pensioners and others. The group ‘others’ included for example unemployed, those whose socioeconomic status was unknown and servicemen and house-wifes. The socioeconomic statuses of pensioners were determined based on their latest status before retirement, if available.

During the years 1976–1995, the number of pensioners without information on any other socioeconomic status was remarkably high, because many were already pensioners in 1975 and 1985, when the first information on socioeconomic status was available. The analysis of cancer incidence by socioeconomic status was, therefore, limited to persons younger than 85 years in 1995–2014 for whom information on the status prior to retirement was likely to be available. Also, persons under 25 years old were excluded, because they rarely have achieved their final socioeconomic position, and the information of children is based on the socioeconomic status of the adult reference person of their household [1]. Those pensioners, for whom we could not determine socioeconomic status prior to retirement, were excluded. We also excluded students due to small number of persons in the elderly study population.

[1] Statistics Finland, “Official Statistics of Finland (OSF): Employment [e-publication].” [Online]. Available: http://www.stat.fi/til/tyokay/index\_en.html. [Accessed: 04-Jun-2019].